PROHIBITION

ITS ECONOMIC AND INDUSTRIAL ASPECTS

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PROHIBITION

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ITS ECONOMIC AND INDUSTRIAL ASPECTS

BY

HERMAN FELDMAN, PH.D.

ASSISTANT PROFESSOR OF INDUSTRIAL RELATIONS, AMOS TUCK SCHOOL OF ADMINISTRATION AND FINANCE, DARTMOUTH COLLEGE; AUTHOR OF "THE REGULARIZATION OF EMPLOYMENT"

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TO

SAMUEL McCUNE LINDSAY

PROFESSOR OF SOCIAL LEGISLATION

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PREFACE

The occasion for this study was the preparation of a series of twenty articles for the press, each dealing with some specific economic or industrial aspect of prohibition. The findings were the result of an investigation conducted over a wide area, including an elaborate questionnaire survey. The writer is indebted to a large number of industrial concerns, government officials, trade association secretaries, insurance agents, social service executives, brewers, distillers, trade union agents and others —in all, some two thousand persons—who supplied the information contained here.

This study is not put forward as complete or exhaustive, and should not be regarded as more than a preliminary survey. In some instances the facts were almost inextricable and the author has merely done what he could with them under the conditions. The original articles have, however, been enlarged and thoroughly revised, and new material, such as an appendix dealing with alcoholic deaths, added.

The conclusions reached, which are summarized in Chapter XXI, relate only to the one phase of prohibition discussed—the economic and industrial aspects. Since the question as a whole involves many other considerations—moral, legal, administrative, political, social—I have avoided entirely the controversial issue as to whether or not the Eighteenth Amendment should have been passed or liquor legislation should have taken the particular form of the Volstead Act, nor do I offer suggestions as to what should be done about the prohibition laws to-day. The reasons for limiting the range of this

study, and the scope and methods of the research, are explained in detail in the introductory chapter.

Anyone writing on prohibition is subject to the suspicion of being biased. In this instance the situation is further complicated, first, because the articles were originally prepared for *The Christian Science Monitor,* a newspaper that has strongly championed the Eighteenth Amendment, and, second, because most of the economic results of the measure are reported as being favorable to prohibition. It is to be supposed that this will prejudice the case for some people.

Nevertheless, it is a fact that the writer undertook the study solely as a matter of research, and that the *Monitor* limited the instructions to an insistence upon impartial investigation and the presentation of comprehensive and authoritative data. There was not the slightest suggestion intending to influence the findings, and articles showing the economic disadvantages of prohibition were given as prominent a place as those more favorable to the measure. The writer cannot speak too highly of the liberal editorial policy shown by the *Monitor* in this connection.

Most of the topics considered were approached entirely from the statistical side, the writer being quite in the dark as to what the data would show. The preference would have been to present merely the facts, allowing the reader to form his own judgments entirely. But in many places the figures available were not adequate for a purely quantitative treatment, and the information would have been more confusing than enlightening. In the belief that a reader of a book of this sort likes to compare his own deductions with the author's, conclusions have been expressed in several cases, but they are not intended in a dogmatic spirit. It is recognized that

with the law less than eight years old, and the absence of complete data for even this limited period, the vexing problem of prohibition is too complicated for over-positive statement.

For still another reason there can be nothing final in the conclusions offered. Although the economic and industrial effects studied have, on the whole, proved favorable to prohibition, stability has by no means been reached in certain statistics which may be regarded as indexes of the workings of the prohibition law. These indexes have in some cases shown an unexpected trend during the past few years. They strongly indicate that the next few years will prove the crucial ones in determining whether prohibition is achieving its purposes or showing evidences of disintegration. They suggest the need for carefully watching and compiling the objective data that may enable the public to determine what changes are occurring.

H. F.

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PROHIBITION

ITS ECONOMIC AND INDUSTRIAL ASPECTS

CHAPTER I

INTRODUCTION

PEOPLE who discuss the economic effects of prohibition, or, for that matter, any of the other effects of prohibition, too often go to one of two extremes. The largest group attributes everything that has happened since about 1919 or 1920 to prohibition, some finding the conditions insufferable while others are full of praise. The second group consists of skeptics who are so much impressed by the fact that other things could explain present-day circumstances that they seem unwilling to admit that prohibition has had any effects at all. They forget that prohibition itself was a new and considerable circumstance. Its effects may well be exaggerated, but they certainly should not be waved aside as negligible.

The discussion of the prohibition problem suffers in other instances from the fanaticism injected into the question. This is not confined to the "Drys," as some think; but is common to the extreme groups in both camps. Consider, for example, the quality

of the testimony for the "Wets," given by the late Hudson Maxim, at the recent Senate hearings:

Far beyond the dawn of human history, the progenitors of the great white race were brewers and hearty drinkers of alcoholic liquors—the same great white race that has discovered and conquered all of the lands of the seven seas and given to the world all that we know of civilization and progress.

There has always been alcohol in the blood of world-conquering world-enlightening manhood. . . .

Alcohol is the medicine par excellence that brings comfort and well-being. Alcohol is the greatest inhibitor in the world of mind preoccupations and mind-wearying cares. It shields and protects the mind from mental distractions and brings rest and induces recuperation.

At the day's end a drink of alcoholic liquor of some kind with many persons, either with their dinner or afterwards, or both, is very necessary—with some persons it is absolutely indispensable. . . .

It is a fact that next to fire the discovery of alcohol was the most important and useful of all the discoveries in the life history of mankind.

Alcohol is more intimately linked with our well-being, and we are more dependent upon it than upon any other discovery except fire.

Alcohol is the lifeblood of the arts and sciences.

Alcohol is a normal and ever-present constituent of our food in the process of digestion. The human stomach is the greatest brewery in the world.[1]

---

[1] U. S. Senate, *Hearings on the National Prohibition Law.* Before the Subcommittee of the Committee on the Judiciary, Sixty-Ninth Congress, First Session, April 5-24, 1926. (Washington, Government Printing Office, 1926) Vol. I, pp. 166-167.

This kind of material has, to a degree, the merit of being entertaining. In the economic field a similar fervor is sometimes found in the statements made. A spokesman for the "Drys" does not blush to write a pamphlet containing such gems as this: "Merchants on Fifth Avenue and Broadway, New York, say that former drinking men now indulge in 'Shopping Jags' on Saturday afternoon. Instead of staggering home 'soused,' the belated husband arrives tottering under a load of shirts, collars, clothing or neckwear, and bundles for the wife and children." [2]

Even the writings on prohibition by some distinguished economists show a certain freedom from scientific restraint not normally found in their discussions of other subjects. One of the most curiously constructed statistical statements, for example, is that by which Professor Irving Fisher, of Yale, deduces that prohibition has been worth at least $6,000,000,000 a year to this country. This figure, widely quoted, has often been used as if it were a painstaking, scientific calculation based on a meticulous combing of economic data. On the contrary, it is merely a guess, and of a type frequently issued by groups with propaganda in mind, but hardly to be expected from one who has achieved world-wide prominence as a statistical economist.

Professor Fisher's estimate has its origin in his

[2] William J. Johnson, "What Prohibition Has Done for Business," a pamphlet reprinted from the *Scientific Temperance Journal*, September, 1920.

uncritical acceptance, from secondary sources, of accounts of experiments purporting to show the precise effect of alcohol consumption upon individual efficiency. He estimates from this the actual increase in output and wealth. These experiments are considered in some detail in Chapter XIV. We may say here, however, that those he cites are inconclusive and, in some cases, trivial in nature. They deal chiefly with the effects of doses of strong alcoholic drink taken on an empty stomach while at work. Although the experiments did not attempt to measure the effects of lighter beverages consumed after hours and with meals, Professor Fisher asserts that every glass of beer a person drinks reduces his efficiency at work by at least 2 per cent, and reasons from this that prohibition has increased the workers' output in this country by at least 10 per cent.

On this fragile platform, Professor Fisher erects a statistical structure that is too heavy for its base. The way by which he arrives at a precise minimum financial value of prohibition may be seen in the following quotation which, though lengthy, has the merit of preserving the spirit of the original assertion:

> Now let us see how this has worked out in actual fact. National income in 1919, the year before Prohibition took effect, was estimated at $66,000,000,000 by the National Bureau of Economic Research, our chief authority for such statistics. About three-fourths of this consisted of wages and profits, or $50,000,000,000. Let us assume that the remainder (interest, rent, etc.)

was not increased through Prohibition. Most of the $50,000,000,000 was produced where the large cities and industries are, and these are mostly in the East, wet territory. A rough study shows that two-thirds of our national wealth, three-fourths of our corporate incomes, and four-fifths of our personal incomes subject to the income tax were in this territory.

It follows that at least two-thirds of the Nation's wages and profits (and perhaps even three-fourths) were produced in that territory, or over $33,000,000,000. Applying the minimum estimate of 10 per cent, we calculate that at least $3,300,000,000 should be added to our national production by Prohibition—or would be added if Prohibition were fully enforced—simply through the release of human energy and skill. In fact this 10 per cent is trebly safe as a minimum. It is based on the minimum observed reduction of productivity of 2 per cent per glass of beer per day. It is based on an even instead of an uneven distribution of drinking among the workers of the whole country. It is then applied only to a part of the country.

This $3,300,000,000 is 5 per cent of the total income of the whole United States in 1919. It is in addition to $2,000,000,000 that were saved merely by transferring our energies from alcohol production to something possessing true value. In fact, the $2,000,000,000 loss from alcohol production would have been fully $3,000,000,000, perhaps $4,000,000,000 today were it not for Prohibition, or, let us say (in accordance with various other estimates), another 5 per cent of our total income.

In a nutshell, then, Prohibition saves 5 per cent that used to be wasted out of our incomes, and adds another 5 per cent into the bargain.

The only factor which might appreciably reduce either of these 5 per cents applies to the former. That is the wasted money and effort represented by bootleg traffic. This is an unknown quantity but, according to the best estimates, official and unofficial, is very small as compared with pre-prohibition traffic.

This double gain, through the transfer of energy and the increase of energy, is over $6,000,000,000—without counting any savings in the cost of jails, almshouses, asylums, etc.; or any economic savings from reducing the death rate.

"REAL" WAGES RISE TO A NEW LEVEL

Turning now to experience since Prohibition, we ask, Is there any sign of such an increase in national income? There is!

We find that the "real" wages of labor per hour, after making all due allowance for changes in the purchasing power of the dollar, increased 36 per cent between July, 1914, and January, 1925; also that most of this sudden improvement came immediately after Prohibition.

Between 1892 and 1919, inclusive, "real" wages remained almost stationary. The fluctuations never exceeded 4 per cent above or below the average level for those twenty-eight years (excepting only once, in 1897, when it was nearly 7 per cent above). Likewise, beginning with 1920, at a higher level, real wages have remained almost as uniform. This new level is 28 per cent above the old level.

To repeat this striking fact in other words: With the coming of Prohibition, wages suddenly rose from their old level, which they had kept without much change for

over a quarter of a century, to a new level where it now is, a quarter higher than the old.[3]

The range of topics covered in our present study may be roughly classified into three parts: Part I deals with effects upon consumption and purchasing; Part II with effects upon production; Part III with general economic effects, and contains a final chapter drawing some broad conclusions with regard to the survey as a whole.

Despite the emphasis in both the title and the text on the designation "economic and industrial" (which the author had thought had been stretched far enough), readers have in some instances called attention to the omission of one subject or another which they considered significant. The reason for not including these here was not merely the desire to put limits on the number of topics discussed, but particularly because many matters which may be exceedingly important in relation to prohibition as a whole have little bearing on the economic side.

To illustrate: One of the criticisms of prohibition most frequently heard is the greater prevalence of drinking by young folks and by women. This charge is important from a moral or social point of view, but it has not figured at all as an industrial factor. Employers interviewed have often related what they saw going on outside of business, as, for example, at dances and dinner parties, but there was

[3] Irving Fisher, *Prohibition at Its Worst* (New York, 1926), pp. 159-161.

practically no complaint that drinking by young folks and women had reduced efficiency, increased the frequency of accidents, or affected their personnel in any other way investigated. On the contrary, one of the frequent reactions from executives in clerical concerns and in other companies employing a large number of women, was the comment that they did not believe they had anything to report that would be of interest to the writer, because they had had no liquor problem among their employees before prohibition and had none now.

FACTUAL BASIS OF THE MATERIAL

The factual basis of this study will be clearer if the methods of investigation employed and the sources of information tapped are briefly described. This will give the reader an idea of what may be expected.

The writer has spent over nine months in this investigation; he has conferred with leading authorities, visited a considerable number of plants, examined the pertinent documentary material, and traveled over an area including the New England states, New York, New Jersey, Pennsylvania, Ohio, Michigan, Maryland, and other states. He has made himself familiar with most of the articles and statements made concerning the economic aspects of prohibition and has corresponded by letter and questionnaire with a large number of people throughout the country who were believed to be in a position

to supply information. Two or three illustrations of the efforts made may prove of interest in this connection.

One of the minor subjects investigated was the effect of prohibition upon the brewery and distillery industry and upon the workers directly affected. Information on this aspect, constituting the basis of Chapter XVIII, was secured partly from personal interviews but chiefly as a result of batches of letters and questionnaires sent to brewery owners and distillers all over the country, to industrial associations in former distilling centers, to numerous locals of the brewery workers' union and the bartenders' union, to the U. S. Chamber of Commerce and other trade associations, to the U. S. Brewers' Association, the World League against Alcoholism and to other individuals and organizations.

A more important subject of inquiry was the attempt to get an intimate picture of the way that prohibition was affecting the economic life of the wage-earner. In this the investigation was singularly fortunate in obtaining the coöperation of three of the largest insurance companies writing industrial insurance policies. This is a helpful source of information that seems never to have been used before in a prohibition survey. One of the companies sent out a questionnaire to all the agents who had been in its employ since 1914, and obtained 520 replies, all of which became the property of this survey. In the case of the other two companies, the answers were obtained directly through the branch managers

in charge of local offices, who in some instances discussed the questionnaire at regular meetings of the agents, taking a viva-voce vote on each question, or getting information through personal interviews with the agents. Anywhere from 750 to 1000 industrial insurance agents located in various parts of the country participated in this part of the survey. In addition, letters and questionnaires were addressed to the departments of labor in most of the states and to the officials in charge of work with women and children. Material aid was also secured from the returns received by *The American City,* which coöperated by sending out questionnaires to mayors of communities having from 10,000 to 50,000 population, so that the smaller towns were in some degree covered.

Since the industrial investigation constitutes the major feature of our survey, it seems necessary to describe it in somewhat more detail and to pass over other sections, so as to illustrate concretely how the factors of impartiality of approach and objectivity of data were taken into account. While this survey was, in the main, conducted by questionnaire and personal investigation among employers, liberal reliance was also placed on the observations and experience of others in authoritative positions. For example, to make sure of getting as much information as possible about drunkenness as a factor in industrial accidents, every workmen's compensation commission or accident board in the country, federal or state, was communicated with, as well as sev-

eral of the larger companies writing employers' liability insurance, and no lead suggested was neglected.

PERILS OF THE QUESTIONNAIRE METHOD

Anyone who makes a study of a contentious issue by means of questionnaires at once lays himself open to a threefold attack. It may be alleged that the people to whom the questionnaire was addressed were hand-picked for the purpose of bolstering a side. If this fails, it may be claimed that the letter sent, or the questionnaire itself, was framed in such a way as to stimulate answers favorable to a particular point of view. If the mailing list and the questionnaire are both beyond criticism, there is still left the opportunity to assert that the answers to the questionnaires were not impartially interpreted and the facts garbled to prove a case.

An instance of such attacks in the field of prohibition survey is that leveled against a well-known industrial magazine which has been active in compiling statements from prominent persons as to the benefits of prohibition.[4]

The writer has done all he could to avoid any basis for criticism on the grounds mentioned. If we shall now go into detail to indicate by one example how the industrial survey was made, it is because in this era of prohibition propaganda such an explanation is indispensable in asking the reader's confidence.

---

[4] U. S. Senate, *Hearings,* pp. 23-24.

HOW THE LIST OF CONCERNS WAS DRAWN UP

In preparing the list of companies to which the questionnaire was to be sent, the purpose was to include as many as possible which had long-established employment departments, as such concerns were most likely to have employment records. The best, and at the same time most representative, list available was that of the American Management Association, because it included hundreds of employment supervisors and production managers.

To fill out the list with a larger representation from the middle West and far West, the writer sent letters to the secretaries of the chambers of commerce of the principal industrial cities, such as Detroit, St. Louis, Grand Rapids, Indianapolis, Cleveland, Chicago, St. Paul, Minneapolis, Los Angeles, San Francisco, etc., as well as Pittsburgh, Buffalo, Syracuse, and others in the East, requesting them to give the writer a selected list of the largest and most representative firms.

The list was further supplemented geographically to some extent by selections from the directories of the National Metal Trades Association, the Taylor Society and similar sources. In the case of the railroads, about fifty with the largest mileage were selected. A list of coal mines was obtained from the associations of mine operators in the various districts, along with a hundred names suggested by *Coal Mine Management.*

From the annual report of the American Electric

Railway Association, about seventy-five names were selected of street railway companies throughout the country. The writer made every effort to get a thoroughly representative list, industrially and geographically, giving preference only to firms in cities formerly "wet." Of the 1,200 or more concerns addressed, the attitude toward prohibition by the company or by its principal officers was not given any consideration at all, and was known in only two instances.

About 90 per cent of the information comes from states which did not have state-wide restrictive legislation before national prohibition came into force. Concerns in New York, Massachusetts, Illinois, Pennsylvania, and Ohio account for well over half the replies, and a considerable number come from Missouri, Wisconsin, Michigan, Rhode Island, Connecticut, and California, in the order named. The replies from states "dry" before national prohibition are comparatively few and scattered, but their experience has not been disregarded, since some "dry" states were so close to "wet" states that their restrictions did not really matter.

The employees in the concerns returning questionnaires numbered more than 900,000, of which a little less than 80 per cent were male. Including the concerns visited by the writer personally, over 1,250,000 employees were on the pay-rolls of the employers whose experience has been summarized. The great majority of these employees were factory workers.

THE LETTER AND THE QUESTIONNAIRE

In order to eliminate any suggestion of the answer expected, and to get as unbiased a reply as possible, both the letter and the questionnaire were carefully constructed. The letterhead on which the letter was sent was the writer's own stationery, containing only the name of Dartmouth College and the author's title. The letter and questionnaire were sent to a score of university professors in various departments of statistics, government, and social sciences, asking for corrections and suggestions. As sent to the mailing list, the letter read as follows:

Gentlemen:

I am making an impartial study of the economic and industrial effects of prohibition, and am very anxious to get your unbiased observations in this field, irrespective of what your personal attitude may be toward the Eighteenth Amendment. Your company may not have kept such records as those called for in the attached questionnaire, but your observation of conditions, nevertheless, will be of much value.

You will find it possible to answer the questionnaire in five minutes, if that is all that you can spare. On the other hand, if you are particularly interested in this subject or impressed, as many are, with its great importance, I shall appreciate any information or advice you may be able to send me with regard to it. But please do not neglect to reply, as you are one of several executives upon whose observations we are depending. This is not merely a study I myself am making, but is also in be-

half of two projected investigations by impartial authorities, whose plans at present are confidential.

The information collected from the various executives will be compiled and published in the press a few weeks hence, as the observations of leading industries in the country. You need not fear, however, that your name or that of your company will become public in case you wish it otherwise. If you put a little check mark in the appropriate place in the questionnaire, it will be kept in complete confidence.

Please let me hear from you.

Yours very sincerely,

.....(signed)

The careful attention to the planning of the questionnaire brought its reward in numerous comments as to its impartial character. One happened to fall into the hands of Roger W. Babson who, unsolicited, wrote the author as follows: "Your questionnaire, in my opinion, covers the entire ground adequately and from angles which have not before been emphasized in the study of this subject. Too often such inquiries serve to conceal more information than they reveal, and if an effort is made to secure detailed information through such methods, the set of questions is generally too involved and intricate for the average person receiving it to bother with." This questionnaire is shown in the accompanying illustration.

One of the difficulties eliminated was that of deciding definitely to what category of replies an answer belongs. Since the person replying to the

KANAWHA COLLE

Please answer this questionnaire as far as you can and return to
H. FELDMAN, P. O. BOX 406, HANOVER, N. H.

Name of Company ..... Address .....

Name of person replying ..... Position in the Company .....

Number of employees on payroll ..... Approximate number of males (or per cent) .....

Do you wish this information kept confidential? Check one of the following:

☐ *Keep entirely confidential.* ☐ *Keep part confidential (indicate which part).*
☐ *You may quote this if you submit copy and secure approval.*

What are your rules or established practices (if any) with regard to employees who come to work under the influence of liquor, or who drink during working hours? .....

.....

.....

.....

A. DISCHARGES AND LABOR TURNOVER ON ACCOUNT OF DRUNKENNESS

1. Looking back over the conditions of the past ten or twelve years, has the problem of drunken employees become less serious or more so since prohibition? (Check one of the following):

☐ *A marked reduction*
☐ *A small reduction* } *in the number of employees discharged or disciplined for drunkenness.*
☐ *No noticeable change*
☐ *Conditions worse, with more discharges for drunkenness.*

2. Can you supply statistics of discharges for drunkenness that will support your observations as given above? (Perhaps your "dead file" of employees discharged, or some other record would yield valuable facts.) Check one of the following:

☐ *I am supplying statistics, in columns 1, 2, and 3 in the table on the next page.*
☐ *I cannot supply the statistics now because not compiled, but we have records that might be worth your going through if you sent a representative.*
☐ *I cannot supply statistics because* .....

.....

3. Have you noticed any changes in the type of labor applying for employment, or in labor turnover, that you would attribute to prohibition? Please comment in outline here and explain more fully, if you care to, in your letter.....

.....

.....

.....

B. ABSENCES, TARDINESS BECAUSE OF DRUNKENNESS AFTER SUNDAYS OR PAY-DAYS

4. Has the problem of absences or tardiness on Mondays, or after pay-days, been affected by prohibition? Please check one item in each column below:

☐ *Situation considerably improved*
☐ *Situation somewhat improved* } *and I attribute this* { ☐ *chiefly to prohibition.* ☐ *partly to prohibition.* ☐ *not at all to prohibition.*
☐ *Situation worse*
☐ *No noticeable change.*

5. Can you supply statistics of such absences and tardiness which will support your observations as given above? Check one of the following:

☐ *I am supplying statistics in columns 8 and 9 on next page of this questionnaire.*
☐ *I cannot supply the statistics now because not compiled, but we have records that might be worth your going through if you sent a representative.*
☐ *I cannot supply statistics on this because* .....

Comment .....

.....

C. ACCIDENTS CAUSED BY EXCESSIVE DRINKING

6. Have you observed any change in the character or frequency of accidents in your plant since prohibition? Check one item in each column below:

- ☐ *Large reduction in accidents*
- ☐ *Slight reduction in accidents*
- ☐ *Increase in accidents*
- ☐ *No noticeable change.*

} *and I attribute this* {

- ☐ *chiefly to prohibition.*
- ☐ *partly to prohibition.*
- ☐ *not at all to prohibition.*

Comment ..... Any explanation that would throw light on your answer above

7. Can you supply statistics of accidents which will support your observation as given above? Check one of the following:

- ☐ *I am supplying statistics in columns 4 to 7 below.*
- ☐ *I have none compiled but the records available may repay further study by your representative.*
- ☐ *I cannot supply statistics because* .....

D. PRODUCTIVITY AND PROHIBITION

8. Has there been any change in the individual productivity of the worker attributable in whole or in part to prohibition? Check one item in each column below:

- ☐ *Marked increase in productivity*
- ☐ *Slight increase*
- ☐ *Decrease*
- ☐ *No noticeable change.*

} *and I attribute this* {

- ☐ *chiefly to prohibition.*
- ☐ *partly to prohibition.*
- ☐ *not at all to prohibition.*

9. Can you supply comparative statistics covering the period under discussion, or illustrate your answer by statistics? Please comment here and more fully on opposite page .....

E. GENERAL ECONOMIC EFFECTS

10. Have you observed any significant changes in the following that you attribute in part to prohibition? Check and comment as indicated.

	Very favorably affected	Favorably affected	No noticeable change	Unfavorably affected	Comments
Standard of living of worker					
Welfare of employees' wives and children					
Stability of family life					
Drinking of milk by adult workers					
Purchase or building of homes					
Purchase of automobiles, radios, etc.					
Thrift among workers					
Other factors (specify)					

F. STATISTICAL COMPILATION

11. Please fill this out as far as you can. If you wish to express yourself in other terms or use a different type of tabulation, disregard this table. It is only suggestive of the types of statistics which would be useful if they should happen to be available.

	1.	2.	3.	4.	5.	6.	7.	8.	9.
		Workers Discharged		Number of Accidents				Number of Absences	
				Total—All Causes		Caused by Inebriety			
Year	Average no. of employees on payroll	Total no. for all causes	For drunkenness	Number	Rate per man-hour	Number	Rate per man-hour	Rate for company, all causes	Part of rate attributable to inebriety
1914									
1915									
1916									
1917									
1918									
1919									
1920									
1921									
1922									
1923									
1924									
1925									
1926									

questionnaire must check one of several statements pinning him down to a definite answer, this problem was reduced to a minimum.

THE REPLIES SUBMITTED BY THE INDUSTRIALISTS

A feature making for frankness was the promise to keep all information confidential if that was desired. We regret not being able to publish more names of concerns replying, but had we not promised to keep the correspondence confidential, we should have had answers of quite a different tenor. Released from the inhibitions which fear of publication of a firm's name would have engendered, the replies were more sincere in the information and opinions given.

There are some who may, however, feel dubious of any information about prohibition obtained through questionnaires, on the ground that it is bound to be no more than the expression of individual bias on the part of the person replying. We have taken this into account, in both the letter and the questionnaire, and tried to guard against it. Every question is followed by such limiting queries as: "Can you supply statistics that will support your observations as given above?" While this has not solved the problem completely, it had a strong influence in emphasizing the need for an objective attitude in framing the reply.

That such a point of view was in large measure induced by the precautions taken, became more and

more evident as the questionnaires were scrutinized. Many of the executives admitted their bias, and stated that they had made every effort to give facts, not affected by their prejudices. Aside from such self-conscious answers, the evidence of a desire to be impartial and objective is seen in the nature of the returns. A rather small proportion voted a straight ticket; that is to say, few answered all questions uniformly, suggesting, therefore, that there was deliberation behind each reply and consideration of each issue on its merits. That this attitude was quite general, although not without exception, has been one of the most gratifying aspects of the returns.

It was also a pleasure to note the marked interest displayed, making it obvious that employers everywhere are eager to compare experience and get enlightenment on the economic and industrial aspects of prohibition. Of the 350 replies received, a large number apologized for not being able to supply information in greater detail. As instances of the many acts of coöperation, one concern asked for 25 questionnaires more, for distribution among the foremen; another had copies made, and sent them to all the branch managers and traveling representatives; a third wrote that the personnel director had been assigned the function of making a thorough investigation, in conference with the works managers, superintendents, and foremen.

A considerable proportion of the replies were like the latter, so that the results represent the judg-

ment of a good many officials in the concerns co-operating. In other cases, the individuals filling out the questionnaires took special care to mention their long periods of service and their familiarity with employment conditions before prohibition, as well as then.

Taking into account the large amount of coöperation received in this survey, and the wide range of material obtained, one may be permitted to state that whatever be its defects, it is the only investigation of its kind made since prohibition.

Has prohibition proved a desirable measure for the country from the economic and industrial standpoint, or a detriment?

What have been its chief advantages? What its chief disadvantages?

PART I

EFFECTS UPON CONSUMPTION AND PURCHASING POWER

CHAPTER II

WAS LIQUOR CONSUMPTION DECLINING BEFORE PROHIBITION?

NOTHING is more unanimously acknowledged by all except those who labor under an obsession, than that the evil of drink has been steadily diminishing. Not only during the period of prohibition agitation, but for many decades before that, drunkenness had been rapidly declining, and both temperate drinking and total abstinence correspondingly increasing. It is unnecessary to appeal to statistics. The familiar experience of every man whose memory runs back twenty, or forty, or sixty years, is sufficient to put the case beyond question." Such is the view of Fabian Franklin,[1] a prominent publicist, and such seems to be the impression of ninety-nine out of a hundred persons met.

"The Eighteenth Amendment was a mistake. It was the worst blow to the temperance movement. The country was drinking less and less liquor. In a few years the problem would have taken care of itself." This was one of the assertions met again and again in interviews with executives, and a statement almost invariably made by those opposed to

[1] In his book *What Prohibition Has Done to America* (New York, 1922), p. 127.

prohibition. One of the last communications received was from an insurance manager who writes: "I believe that before the passage of the prohibition law the people of the United States were making rapid progress towards temperance. The consensus of opinion among numerous persons of all walks in life is that the real temperance movement of the country has been retarded for many years by an attempt of the law-maker to force the issue by the passage of such a measure."

The writer confesses that at first frequent repetition brought a measure of conviction. There seemed to be no doubt that the trend of liquor consumption had been downward. The claim that we had been consuming less and less liquor before prohibition is undoubtedly a most significant one. Is the assertion supported by any authentic information? What do the official statistics of production and consumption actually show?

The chief sources used in presenting the facts are official figures—the U. S. Census, the reports of the U. S. Bureau of Internal Revenue, the Statistical Abstract of the U. S. Department of Commerce and, for foreign statistics, some tables compiled from government data by the National Bureau of Economic Research.

THE TREND IN 1900-1914

What period shall we choose in studying the growth of temperance? This presents something of a problem. We first considered using the years

1900 to 1918 as the basis, but have decided to limit the period studied to the fifteen years 1900-1914. We believe that we have done so for good cause, as we shall explain. We have, however, also supplied the figures for the years following 1914, for the reader who may wish to have them available.

The reasons for confining our study to a period ending with 1914, instead of the full pre-prohibition era, are several. The Eighteenth Amendment was ratified by the thirty-sixth state on January 16, 1919, and came into force a year later. But prior to the Volstead Act we had war-time prohibition, beginning on July 1, 1919, which was equivalent in its effect to that following the Amendment. Before this, there were lesser war-time restrictions of one kind or another, reducing the quantity of liquor produced and consumed. In May, 1917, Congress first prohibited the sale of liquor to soldiers; in September of the same year, the Food Control bill prohibited the manufacture of distilled liquor for beverage purposes.[2] Priority restrictions further hampered production, while military authorities and communities tried to eliminate the sale of alcoholic beverages within the radius of military camps, etc.

[2] Information as to the history of prohibition, as given here, was secured chiefly from two sources: (1) The Anti-Saloon League of America, *Year Books,* compiled by Dr. Ernest H. Cherrington. These contain pages on the progress of the movement in every state in the union, outlining a history of its prohibition laws. (2) D. Leigh Colvin, *Prohibition in the United States* (New York, 1926), 678 pages. This is the most complete single volume on the subject. See especially pp. 430-451 dealing with "The Progress of State and National Prohibition, 1914-1919."

Moreover, this was a period when people at home were denying themselves both food and drink in patriotic support of the War; and with millions of the male population during 1919, 1918, and part of 1917, in military service abroad or under military supervision here, the trend of consumption for these years would hardly be representative of the normal situation.

From 1914 on we see, also, heavy increases in government taxes on liquor. An official in the U. S. Internal Revenue Bureau supplied us with the following figures:

	October, 1914 to October, 1917	September, 1916, to October, 1917	October, 1917, to February, 1919	After February, 1919
Alcohol for beverage purposes, per gallon	$1.10	..	$3.20	$6.40
Beer, per barrel	1.50	..	3.00	6.00
Wine, per gallon:				
Not over 14 per cent alcohol	..	$0.04	.08	.16
14 to 21 per cent alcohol	..	.10	.20	.40
Over 21 per cent but not over 24 per cent alcohol	..	.25	.50	1.00

It was desirable to omit 1915 and 1916 for the additional reason that during these two years a wave of prohibition sentiment made state prohibition laws effective in ten new states. In the whole previous history of prohibition in this country, from the date of the first prohibition law, in Maine in 1851, only nine states had passed "dry" laws. Dur-

ing the two years 1915 and 1916, statutory acts or constitutional amendments passed in Arizona, Alabama, Colorado, Oregon, Washington, Idaho, Iowa, Arkansas, South Carolina, and Virginia became effective, while Nebraska, South Dakota, Michigan and Montana also joined the "dry" column, making twenty-three states in all in this group. Obviously, then, if there were any reduction in the consumption of liquor, it could not be attributed entirely to voluntary temperance, for it was also caused by the compulsion of restrictive legislation. As a matter of fact, as shown in the supplementary table for the years since 1914, the consumption slumped only temporarily in 1915 and 1916 and showed a rise again in 1917. The Secretary of the U. S. Brewers' Association writes us that the increase that year was due to a large stocking up of whiskey by men of means in anticipation of prohibition. But these figures are for the fiscal year July 1, 1916, to June 30, 1917, long before prohibition, which was first passed by Congress in August, 1917, and repassed over President Wilson's veto on December 16, after which it was submitted for ratification to the states. Hence we do not feel certain that many people were as foresighted at that time as has been suggested.

It seems reasonable that if there were a real trend to temperance it should be shown in the fifteen years 1900-1914, before the wave of restrictive legislation had come into force in the states by state action, and we shall confine ourselves to this clearer period. The official government figures on per capita con-

TABLE I. PER CAPITA AND TOTAL CONSUMPTION OF DISTILLED LIQUORS, WINES AND BEER, 1900-1920

(*Statistical Abstract of the United States*, 1922, published by the U. S. Department of Commerce, p. 697)

Year	Per Capita Consumption				Total Consumption of Distilled Spirits, Wines and Beer (gallons)
	Distilled Spirits (proof gallons)	Wines (gallons)	Beer (gallons)	Distilled Spirits, Wines and Beer (gallons)	
1910-1914 ..	*1.46*	*.60*	*20.38*	*22.43*	.....
1905-1909 ..	*1.43*	*.57*	*19.46*	*21.46*	.....
1900-1904 ..	*1.36*	*.47*	*16.94*	*18.77*	.....
1914	1.44	.53	20.69	22.66	2,252,272,765
1913	1.51	.56	20.72	22.80	2,233,420,461
1912	1.45	.58	20.02	22.05	2,128,452,226
1911	1.46	.67	20.69	22.81	2,169,356,975
1910	1.42	.65	19.77	21.84	2,045,353,450
1909	1.32	.67	19.04	21.03	1,935,544,011
1908	1.39	.58	20.23	22.19	2,006,233,408
1907	1.58	.65	20.53	22.76	2,020,136,809
1906	1.47	.53	19.51	21.52	1,874,758,027
1905	1.41	.41	17.99	19.82	1,694,455,976
1904	1.44	.52	17.88	19.84	1,663,776,829
1903	1.43	.47	17.64	19.53	1,606,217,122
1902	1.34	.62	17.15	19.11	1,539,859,237
1901	1.31	.36	15.95	17.62	1,390,912,302
1900	1.28	.39	16.06	17.73	1,349,732,435

SUPPLEMENTARY TABLE, 1915-1920

1920	.26	.12	2.45	2.84	306,327,169
1919	.77	.51	8.00	9.28	989,367,785
1918	.85	.49	14.87	16.11	1,694,181,043
1917	1.62	.41	18.17	20.20	2,095,535,005
1916	1.37	.47	17.78	19.61	2,005,835,871
1915	1.26	.33	18.40	19.99	2,015,595,291

sumption of alcoholic drinks up to 1914 are compiled in the first part of Table I, and for succeeding years in the supplementary part.

In this connection, it must be explained that by the term "distilled spirits" the government designates whiskey, brandy, rum, gin, pure alcohol and other drinks of high alcoholic content made by distillation. The figures for beer also include ale and similar beverages, and the term "wines" is self-explanatory. The percentage of alcohol in the various pre-prohibition drinks is supplied in the following chapter.

PER CAPITA CONSUMPTION BEFORE PROHIBITION

These statistics give an entirely different picture from what one would gather from popular impression. Even a cursory examination of this table indicates that not only had the total consumption in gallons been mounting since the beginning of the period under consideration, but that the more significant figure, per capita consumption, showed a definite advance in the case of each of the three types of alcoholic drinks. Per capita figures are the real measure of temperance, since they are independent of changes in population.

That these per capita figures were rising brings out the surprising fact that the consumption of alcoholic beverages was increasing faster than the population. As seen in the summarized figures at the top of the table, which reveal the trend better by eliminating some of the confusion of year-to-year figures, the averages of the per capita figures for the period of 1910 to 1914 are higher for each of the three forms of drinks than the averages for the

previous period 1905 to 1909, and the latter, in turn, are higher than the figures for the period 1900 to 1904.

The person who believes that temperance was growing will find little comfort in a fact that might be mentioned in this connection concerning deaths from alcoholism. Such fatalities were at peak figures in this period immediately preceding prohibition. The Metropolitan Life Insurance Company published the statistics concerning the experience of its industrial policyholders in this regard, in its *Statistical Bulletin* for March, 1927, giving the facts for the years 1911-1926. Although deaths from wood and denatured alcohol poisoning are included since 1920 and omitted before, the figures since prohibition are much lower than during the pre-prohibition years. The three years with the highest death rate from alcoholism and from wood and denatured alcohol poisoning are 1912, 1913 and 1916, each with 5.4 such fatalities per 100,000 of population; 1917 is next with a ratio of 5.2; then comes 1914 with 4.8 and 1915 with 4.3. The experience of this group coincides with that of the country's population in general. Additional information on this subject is contained in the Appendix, in which some of the statistics of alcoholic deaths are considered.

TREND OF LIQUOR CONSUMPTION ABROAD

Curiosity led us to look into the question as to whether or not there was a similar trend in liquor consumption in foreign countries. We were frankly

astonished to find that, contrary to the tendency in this country before prohibition, consumption of liquor in England, Germany, and France was either declining or increasing less rapidly.

In stating this fact we are confining our attention to the *trend* of consumption abroad and are not making any comparison between the actual amounts consumed by citizens here and those elsewhere. Even a superficial examination of the tables presented shows that the per capita consumption abroad is much higher than in this country. To take this matter up would involve us in several technicalities, wearisome to the reader, with regard to the amounts consumed by transient foreigners, also the problem of converting quantities in accordance with the regulations of the various governments, would introduce several controversial issues that cannot well be answered by statistics, and, when all is said and done, would only lead us into a digression from our main object of inquiry.

Considering, first, England, the figures for recent years show a decline in the consumption of each of the types of alcoholic beverages from the figures for the early part of the century. We have omitted the year 1914 in this and the following tables because each of the countries participated in the World War during that year and the statistics would reflect the restriction in consumption due to that circumstance.[3]

[3] Since the War, the consumption of alcoholic drinks in Great Britain has dropped considerably. Among the reasons for this

TABLE II. PER CAPITA CONSUMPTION OF DISTILLED SPIRITS, WINES, AND BEER IN GREAT BRITAIN, 1900-1913 *

Year	Spirits of All Kinds (gallons per head)	Foreign Wines (gallons per head)	Beer (gallons per head)
1910-1913	.65	.25	26.71
1905-1909	.91	.27	27.85
1900-1904	1.06	.36	30.74

* From Reports of Commissioners of Inland Revenue, Customs, and Customs and Excise, compiled in *The Brewers' Almanack,* 1915, published in London for the Brewers' Society, p. 156. The United States gallon is only .833 of the English gallon.

Statistics on Germany and France were secured from unpublished records kept by the National Bureau of Economic Research, which has taken the facts from official reports by foreign governments. There was a decline in Germany in the per capita consumption not only of distilled spirits, but of beer as well. The figures for wine do not seem to be

TABLE III. PER CAPITA CONSUMPTION OF ALCOHOL AND BEER IN GERMANY, 1900-1913

Years	Alcohol (liters)*	Beer (liters)*
1910-1913	2.8	102.1
1905-1909	3.7	107.7
1900-1904	4.04	112.9

* A liter is slightly more than a quart (1.056 quarts).

was the decline of the treating custom due to the influence of the War, a great deal of poverty and unemployment, the increased cost of liquor due in part to heavier liquor taxes, and restrictive liquor legislation requiring earlier closing of saloons. Some, however, regard this as due to a growth of temperance. See the interesting article on "Restriction: England's Solution," by Sarah Comstock, in *Harper's Magazine,* June, 1926, pp. 88-95.

available, but we are reconciled to their absence because they are probably not significant in that country, which is principally a beer-drinking nation.

In France, we have a reduction in the per capita consumption of wine between 1913 and 1900, a slight increase in the consumption of distilled spirits, and a substantial increase in the consumption of beer.

TABLE IV. PER CAPITA CONSUMPTION OF ALCOHOL, WINE, AND BEER IN FRANCE, 1900-1913

Years	Alcohol (liters)*	Wine (liters)*	Beer (liters)*
1910-1913	3.86	129	32.9
1905-1909	3.47	157	29.0
1900-1904	3.77	145	27.7

* A liter is slightly more than a quart (1.056 quarts).

Here, then, are the facts about the trend of liquor consumption in the United States during this century, in so far as it is displayed in statistics, as compared with the experience abroad:

(1) The average per capita consumption of *distilled spirits* was higher here in 1910-1914 than in the two previous five-year periods, as against a decline in Great Britain and Germany, in comparison with the earlier part of the century, and a slight increase in France.

(2) The average per capita consumption of *wines* was higher here in the five-year period 1910-1914 than in the two previous periods, while in England and France the trend of consumption was downward.

(3) The average per capita consumption of *beer* in the five-year period 1910-1914 was higher here than the per capita during the two previous five-year periods, differing from England and Germany, where the trend of consumption was markedly downward, and exceeding the rate of increase in France.

WHERE IS THE EVIDENCE FOR INCREASING TEMPERANCE?

In the face of these statistics, where is the basis in fact for the repeated assertions commonly accepted, that temperance was progressing rapidly before prohibition? Of course, much depends upon the meaning of "temperance"; but for all practical purposes there is no other basis to go by except the per capita consumption for the first fifteen years of this century.

The reports of licensing boards show that saloons were by no means losing out, though in many jurisdictions less numerous than before. Yet in Boston "proper," for example, there was, in 1914, one saloon to every 558 inhabitants; including other types of places dispensing liquor, there was one license to every 310 inhabitants. What they lacked in number they made up in volume of sales; the saloons in 1914 were "bigger and better" saloons.

The liquor industry itself was not only a vast and profitable one when prohibition came, but had been showing a consistent growth. A comparison of the figures taken every five years by the U. S.

Census for, let us say, from 1914 back to 1899, shows that the capital investment in each branch of the liquor industry had increased to a marked degree.

TABLE V. INVESTED CAPITAL IN THE LIQUOR INDUSTRY IN THE UNITED STATES, 1899-1914

(U. S. Census of Manufactures, volumes on selected industries, for years named)

Type of Liquor	Capital Invested			
	1914	1909	1904	1899
Beer	$792,914,000	$671,158,000	$515,630,000	$413,767,000
Distilled liquors	91,285,000	72,450,000	50,101,000	32,540,000
Wines	31,516,000	27,908,000	17,775,000	9,838,000
TOTAL	$915,715,000	$771,516,000	$583,506,000	$456,145,000

Our best index to the trend of temperance, therefore, is the per capita consumption from year to year, and the increase in this for all three branches of the liquor industry seems the more striking because it occurred in the face of a tightening of the cord of restrictive legislation around the industry for decades—by hostile communities under local option laws and by states as a whole.

How explain this increase in investment and in per capita consumption? Was it due to a general increase throughout the country? Or was the decrease in the "dry" states overbalanced by larger increases in the "wet" states? All information available is pure guess. There is no way of knowing how much liquor was actually consumed in one state as against another. We considered the internal revenue

taxes, but these are taxes of production paid at the distillery or brewery, and do not show where the liquor was actually consumed. Nor do the facts at the licensing boards in the individual states show anything as to the trend of consumption, for they issued licenses to retailers without counting how much they sold. Various authorities and government officials were interviewed about this, and they all agree that there is no way of telling where consumption increased most, except by inference.

It is still true, as stated in an earlier investigation by the Committee of Fifty, that: "It would require the authority of the general government and an immense expenditure to make an exhaustive statistical inquiry on the subject of the consumption of alcoholic drinks; and it is very doubtful if even the national government could obtain all the important facts on this most difficult topic." [4]

SOME EXPLANATIONS

We shall hazard, as one explanation, the guess that up to 1914, pre-prohibition prohibition by the states did not really prohibit because "dry" cities were right beside "wet" cities, and "dry" states next to

[4] Francis G. Peabody, *The Liquor Problem.* A Summary of Investigations Conducted by the Committee of Fifty, 1893-1903 (Boston, 1905), 182 pp. Only the introduction was written by Francis G. Peabody, the other sections having been prepared by John S. Billings, Charles W. Eliot, Henry W. Farnam, Jacob L. Greene and Raymond Calkins, but the volume is indexed under Peabody in the New York Public Library and we shall so cite it for convenience. The quotation given above appears on page 46.

"wet" states. In spite of the absence of facts to prove it, one may assume that consumption of alcoholic beverages in "wet" localities was the higher the tighter the enforcement in "dry" localities. The citizen who wanted to drink could either tote his liquor home or drive over to the nearest "wet" spot. The writer himself remembers in the old days certain railroad stations, especially in the South and middle West, where the trains brought back their citizens on a Sunday night half-drunk or more, and carrying heavily laden suit-cases that clinked. Indeed, what seems to be a growth of dryness shown through the exercise of local option, was in many cases merely the desire of some people to abolish saloons in certain places and to concentrate them in others. This would explain the attitude of a suburbanite who voted "dry" in his own community as long as liquor was freely available in saloons near his office in the city, or vice versa.

It was brought out in an investigation over two decades ago by the Committee of Fifty that: "Under local option, many persons who are not prohibitionists habitually vote for no-license in the place where they live, or where their business is carried on. . . . By forethought, such persons can get their own supplies from neighboring places where license prevails." [5] The report states further: "Even when external improvements have undoubtedly been effected by new legislation, it often remains doubtful,

[5] Francis G. Peabody, *op. cit.*, pp. 55-56.

or at least not demonstrable, whether or not the visible improvements have been accompanied by a diminution in the amount of drinking. Thus, a reduction in the number of saloons in proportion to the population undoubtedly promotes order, quiet, and outward decency; but it is not certain that the surviving saloons sell less liquor in total than the previous more numerous saloons." [6] Hence, those who regarded drink as an evil could, with some justice, conclude that if one wanted prohibition it had to be national in scope.

Another explanation that deserves attention here, but which we shall only touch upon, is the huge immigration during this period, which increased the proportion of adults in the general population, introduced changes in racial stock and somewhat altered the status of the drinking population. A significant comment on the possibility that this is an additional factor in the increase of the per capita consumption is contained in a letter from Miss Cora Frances Stoddard, executive secretary of the Scientific Temperance Federation, who writes:

> We must take into consideration the change in the drinking population that occurred between 1900 and 1914 by the very heavy immigration. After 1900, our immigrants more than ever before came from countries where the temperance movement had made little, if any, progress. That is, we had more from southern and eastern Europe in proportion to fewer from northern Europe (Germany and Scandinavia and Great Britain) where

[6] *Ibid.*, p. 75.

even in 1900 there had been for years anti-alcohol movements of some strength.

A hasty glance at the statistics on immigration shows that between 1905 and 1914, millions of Italians alone were added to our population. Relatively few of these immigrants settled in the states which were going dry. Is it not possible, therefore, that this addition of new drinking populations helps to offset the gains we otherwise would have seen from the sweep of local option and state prohibition in the more rural Southern and Western states?

I made a drawing once, years ago, which showed that the per capita consumption of alcohol for quite a period of years had risen and fallen in a curve pretty closely coinciding with the immigration curve. Of course, this is not proof-positive, because both immigration and the consumption of alcohol tended to rise and fall with economic conditions. But I have long been inclined to think that sufficient recognition has not been given to the influence on American consumption of alcohol under conditions resulting from the addition to our population of millions of people to whom drink was a matter-of-fact part of their daily life. It might well be true that sobriety was increasing among the longer established part of the population, while the addition of large numbers of drinking males kept up the per capita consumption.

If immigration was to any considerable extent responsible for the steady increase in consumption, it may explain the seeming inconsistencies between the statistics and the general impression that sobriety was gaining ground.

The idea commonly held that there was a ten-

TABLE VI. PER CAPITA AND TOTAL CONSUMPTION OF DISTILLED LIQUOR, WINES, AND BEER, 1875-1899

(*Statistical Abstract of the United States*, 1922, published by the U. S. Department of Commerce, p. 697)

Year	Per Capita Consumption				Total Consumption Distilled Spirits, Wines and Beer (gallons)
	Distilled Spirits (proof gallons)	Wines (gallons)	Beer (gallons)	Distilled Spirits, Wines and Beer (gallons)	
1899	1.17	.35	15.19	16.71	1,250,174,849
1898	1.11	.28	15.84	17.23	1,266,662,417
1897	1.01	.53	14.82	16.36	1,180,941,634
1896	1.00	.26	15.71	16.97	1,202,893,116
1895	1.13	.30	14.99	16.42	1,142,552,426
1894	1.33	.32	15.17	16.82	1,148,447,584
1893	1.51	.47	16.04	18.03	1,207,365,215
1892	1.48	.43	15.07	16.98	1,114,876,299
1891	1.42	.45	14.72	16.59	1,067,471,393
1890	1.39	.46	13.57	15.43	972,705,175
1889	1.32	.56	12.73	14.60	894,881,329
1888	1.26	.61	12.78	14.65	878,671,982
1887	1.21	.55	12.24	14.00	821,369,621
1886	1.28	.45	11.21	12.93	741,975,345
1885	1.27	.39	10.62	12.28	689,424,459
1884	1.48	.37	10.74	12.60	691,627,025
1883	1.46	.48	10.27	12.21	655,727,598
1882	1.40	.49	10.03	11.92	625,499,650
1881	1.38	.47	8.65	10.50	538,862,271
1880	1.27	.56	8.26	10.08	505,845,038
1879	1.11	.50	7.05	8.66	423,260,773
1878	1.09	.47	6.68	8.24	392,164,889
1877	1.28	.47	6.58	8.33	386,222,772
1876	1.33	.45	6.83	8.61	388,482,054
1875	1.50	.45	6.71	8.67	381,065,041

dency towards temperance is probably based, in part, on the fact that the increase in the consumption of beer was greater than that of distilled spirits. It was actually true, also, that the last decade of the nineteenth century witnessed a decreasing per capita

consumption of distilled spirits. We are adding a table on this for those who may be interested in the available facts, because it will explain the significant comment made by an authority on the liquor question whom we shall now quote.

Professor Henry W. Farnam, one of the very few living members of an eminent group responsible for the studies made by the Committee of Fifty, on seeing the present chapter as a newspaper article, made the following significant comment in a letter to the writer:

There was a time when the rapid increase in the consumption of malt liquors was accompanied by a slight decrease in the consumption of distilled liquors, and there seemed ground for the claim of the brewers that they were the true apostles of temperance. The change came when, with their increased wealth and power, they controlled the saloons and sold anything from which they could make money, and then the increase in the consumption of beer was accompanied by an increase in the consumption of distilled liquors and a greater laxity in the enforcement of state license laws. All of this, I think, a very important part of history, because it explains why the people of the United States wanted to outlaw the liquor traffic, including both light and heavy drinks. This was practically acknowledged by the brewers themselves in a very remarkable deathbed confession.

In the year 1917, when they saw the handwriting upon the wall and realized that they must make a desperate effort to maintain the liquor traffic if they would check the steady progress of prohibition, they set to work to influence public opinion. In a well displayed advertise-

ment, filling half a page in one of our local papers, the United States Brewers Association made the following remarkable statement:

"The true relationship of beer is with light wines and soft drinks—*not with hard liquors.*

"For this false mental association the brewers are largely responsible. Keen competition in the early days of the brewing industry, before the perfection of modern bottling methods, led the brewers as individuals to encourage the establishment of saloons, which were at that time the only agencies through which their product could be lawfully sold. This unwise individual action on the part of many led to an undue multiplication of the saloon —a form of retail distribution which dealt not only in malt beverages but also in intoxicating liquors, and established a business affiliation that has since created the false mental association.

"Thus our product has been unjustly and improperly linked with those influences—over which we have had no control—that have actually promoted intemperance." [7]

Between July 1, 1914, and the end of June, 1918, nineteen states went "dry" by state law as did also many localities in other states; people later abstained from excessive consumption for war reasons and many men were away in camps or abroad; there were war-time restrictions and high war taxes, and other reasons for reduced consumption existed. The beer sold in that period did drop from 66,189,473 barrels to 50,266,216 barrels. Some people will regard

[7] See also Professor Farnam's testimony in the U. S. Senate Committee, *Hearings,* Vol. II, pp. 1032-1040.

this as an example of successful restriction, others will cite it as an evidence of how little effect state action alone had. Just what should have been done, if anything, is not, however, our concern here.

CHAPTER III

THE NEWER RÔLE OF ALCOHOL

ONE who looks for the first time at the figures of alcohol production cannot avoid a shock at the increased volume shown for recent years. As seen in the middle column of the table presented, the aggregate production of alcohol in the fiscal year 1926 was greater than in any year except 1917; and this increase is responsible for bringing the aggregate production of all distilled spirits, in 1926, to a figure higher than in any pre-prohibition years except 1916 and 1917.

"What? During prohibition! So that's how the law is enforced!" would be the exclamation of most persons unfamiliar with the facts. For to ninety out of a hundred people the only use of alcohol is as a beverage. They do not know that during the past decade new industrial processes have caused an enormous expansion of the uses of alcohol in industry.

THE PAST USE OF ALCOHOL

For those whose memory with regard to old-time beverages is becoming hazy, we are supplying some facts which will refresh their knowledge of what

TABLE VII. PRODUCTION OF DISTILLED SPIRITS IN THE UNITED STATES, 1912-1926

(U. S. Bureau of Internal Revenue, *Statistics Concerning Intoxicating Liquors*, March, 1926, Table 5, and U. S. Commissioner of Internal Revenue, *Annual Report*, 1926, Table 48)

Year	Whiskey, Rum, Gin and Brandy (tax gallons)*	Alcohol, Pure and Denatured (tax gallons)*	Total
1912	113,941,778	73,630,033	187,571,808
1913	114,634,150	78,972,108	193,606,258
1914	103,045,322	78,874,220	181,919,542
1915	59,555,040	81,101,064	140,656,103
1916	70,505,028	182,778,246	253,283,273
1917	74,502,520	211,582,944	286,085,464
1918	28,387,681	150,387,681	178,833,799
1919	2,618,217	98,160,324	100,778,541
1920	2,829,068	98,436,170	101,265,238
1921	2,827,674	85,068,776	87,896,450
1922	2,257,195	79,906,102	82,163,297
1923	2,222,784	122,402,850	124,625,634
1924	1,631,803	135,897,726	137,529,529
1925	1,332,714	166,165,518	167,498,231
1926	1,538,275	202,271,670	203,809,945

* The distinction between wine gallons and tax or proof gallons, important for taxing purposes, is not easy to make clear. A wine gallon is the ordinary liquid measure with which we are all familiar. When a liquid contains alcohol and is subject to tax, this tax is levied in accordance with the actual amount of alcohol it contains. To determine the proportion of alcohol, a test or "proof" is made by government inspectors. The government tax per gallon is based on 50 per cent alcohol content. If the alcoholic content exceeds 50 per cent, the additional amount is taxed in proportion. A proof gallon is thus a wine or ordinary gallon of 50 per cent alcohol, and is the same as a tax gallon.

Ordinary commercial alcohol generally contains about 95 per cent alcohol, so that there are on the average about 1.9 tax gallons in a wine or ordinary gallon of alcohol. Government statistics appear sometimes in tax gallons and at other times in wine gallons. If the latter, it will be specifically stated.

alcohol was used for in the past. Incidentally, the list would be valuable for those who are inclined to reconsider prohibition policy with regard to light

TABLE VIII. ALCOHOLIC CONTENT OF VARIOUS BEVERAGES
(Francis G. Peabody, *The Liquor Problem*, p. 18)

Beverage	Per Cent of Alcohol	
	Range	Average
American lager beer	1-7	3.8
Vienna lager beer	3-5	4.7
Munich lager beer	3-5	4.8
English ale and porter	3-7	5
Hard cider	4-8	5
French clarets	6-12	8
American champagne	6-10	8
German Rhine wines, Moselle, etc.	7-12	8.7
American red wine	6-12	9
Champagne	8-11	10
French white wine	9-12	10.3
Sweet catawba	10-15	12
Madeira	15-16	15.4
Sherry	16-20	17.5
Gin	20-40	30
Chartreuse	....	32
Whiskey, American common	25-43	35
Whiskey, Scotch, Irish	36-43	40
Whiskey, American best	41-48	43
Brandy	40-50	47
Absinthe	....	51
Rum	40-80	60

wines and beer. Just what prohibition has abolished, and what any less severe form of restriction would bring back, will be clearer by reference to Table VIII, which, by showing the percentage of alcohol in some of the best known forms of intoxicating beverages, will help one who desires modification of the law to puzzle out where he would draw the line.

THE PRESENT USE OF ALCOHOL

Today alcohol is illegal as a beverage and has, instead, become a basic chemical, indispensable in

various industrial processes and in the necessities of everyday life. It is used in tanning, in the manufacture of artificial silk, anæsthetic ether and other drugs, artificial leather, automobile seats, billiard balls, paint, varnish, lacquer, shellac, embalming fluid, "Sterno" and other heating substances, gas mantles, photographic supplies, and moving picture films. Many articles for the house require alcohol in their production: furniture, ink, pencils, shoe polish, and disinfectants. The entire line of cosmetics, from lipstick to rouge, requires it, as do toilet waters, hair tonics, and perfumes. Anti-freeze mixtures for the automobile radiator consume vast quantities of alcohol.

If prohibition or restriction of liquor is likely to make any further progress in the world, the use of alcohol as a beverage lies with the past, and its future is as a chemical. Today it is an essential in the chemical and dye industry, being used as a solvent in the purification and preparation of substances too numerous to mention. One authority claims that as a raw material in chemicals it is exceeded in importance only by water. One large rayon mill in this country uses over 2,000,000 gallons of denatured alcohol annually.

Some of the enthusiasts in the industry say that not only have present industrial uses begun to eclipse its conspicuousness as an intoxicant but there may be developments making industrial alcohol increasingly important to economic life in the future. They say that it is not impossible that when the

price of gasoline goes up sufficiently, alcohol, in combination with other combustibles, may some day become widely used as a source of fuel supplies. Already such mixtures are in use in Germany, in Central and South America, and elsewhere.

There has been considerable criticism of prohibition administration for permitting so much alcohol to be produced, for allowing part of it to be diverted, and for making this chemical poisonous to prevent people from drinking it. We are not dealing with the law enforcement side of prohibition, but in this particular case there are important economic aspects. Hence we shall consider the types of alcohol distilled, some of the criticisms made, and some of the problems which the production of industrial alcohol presents.

TYPES OF ALCOHOL PRODUCED TODAY

The distilled spirits now produced in this country are of four kinds. The first group, shown in the first column of figures of Table VII, consists of rum and brandy. The reason for the manufacture of rum is the need for it in tobacco curing; and of brandy, for the fortification of wine. The combined legal production of this today is between 1 and 3 per cent of pre-prohibition production, and is not significant. The second column of figures in the table sums up the three other kinds, all alcohol, classified as pure alcohol, specially denatured alcohol, and completely denatured alcohol.

Of the total alcohol produced in 1925, about 6 per cent was withdrawn for consumption as pure, without denaturization; 40 per cent was *specially denatured* alcohol, 53 per cent was *completely denatured* alcohol, and 1 per cent was lost before withdrawal.

The reason for the pure form is to meet the requirements of manufacturing druggists, retail druggists, hospitals, research laboratories, patent medicine concerns, and manufacturers of flavoring extracts requiring potable alcohol. There has been no important criticism of the distribution of pure alcohol. The main discussion has centered about denatured alcohol.

Completely denatured alcohol was prepared according to a limited number of fixed formulæ until a year ago, but these were since reduced to two, requiring mixture with products that make it difficult or impossible to recover the pure alcohol. Such alcohol is used in alcohol lamps, in various heating and lighting devices, in the manufacture of formaldehyde and various dyes, and for general industrial purposes. The most extensive use, however, is in the radiators of automobiles as an anti-freeze solution during cold weather, because a mixture of alcohol and water freezes at a lower point than water alone. About three-quarters of the total output of completely denatured alcohol was used as anti-freeze last year, amounting to over 35,000,000 wine gallons, a quantity greater than the entire industrial consumption for all purposes prior to the War.

There has been a large increase in the consump-

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tion of alcohol for anti-freeze, explainable chiefly by two important facts. As against the 7,565,446 passenger cars and trucks registered in 1919, there were 22,001,393 listed in 1926. While 10.3 per cent of the passenger automobiles produced in 1919 were closed cars, seven times as many (72 per cent) were closed in 1926, suggesting much more frequent, if not continuous, operation in cold weather.[1] The likelihood that part of the anti-freeze alcohol was redistilled for bootleggers' purposes is considered in the general problem of diversion discussed below.

Specially denatured alcohol is made in accordance with sixty-eight formulæ of special kinds. One formula is adapted for the use of alcohol in paints, varnish, shellac; another for lacquer, as finish for automobiles. Two formulæ, known as "ether" formulæ, figure largely in rayon manufacture, one of the new industries requiring alcohol which have come since the War. Other formulæ are of the odorless type and cover vinegar manufacture, perfumes, lotions, hair tonics, rubbing alcohols, and similar preparations. Incidentally, it is with this last group that the greatest troubles have been encountered in trying to prevent redistillation.

DIVERSION TO ILLEGAL USES

In the table we have presented, the figure of total alcohol production for 1926 is almost two and one-

[1] National Automobile Chamber of Commerce, *Facts and Figures of the Automobile Industry,* 1927 Edition (New York, 1927), pp. 4 and 15.

half times as great as that for 1921. This difference is so huge as to suggest diversion to bootlegging purposes. And, indeed, the most extravagant statements have been made as to the extent of the diversion—a situation which hardly needs exaggeration to be impressive. The most startling statement of this kind was made at the hearings of the Senate Committee in April, 1926, by Emory R. Buckner, then United States Attorney for the Southern District of New York, whose overstatement seems to have been prompted in part by his zealous desire to secure larger appropriations for enforcing the law. In this testimony he went so far as to estimate a diversion of 60,000,000 wine gallons of alcohol during 1925, which, in tax gallons, would amount to about three-quarters of the total shown in our table.[2]

We are no judge of the possibilities of diversion but from the reports we have studied and from the conferences we have had with government officials, it appears that Mr. Buckner has wandered far from the mark and that the statement is absurd. It has not been accepted in responsible circles. It was hardly within Mr. Buckner's field of knowledge. We are inclined to accept as much more reasonable and authoritative the estimates of diversion frankly made by the Prohibition Bureau itself, closely in touch with the situation.

The reason why many people are inclined to be

[2] U. S. Senate Committee, *Hearings,* Vol. I, pp. 112-126; 178-185, and especially his prepared statistical memorandum supporting his estimate in detail, in Vol. II, pp. 1656-1660.

overimpressed with the extent of diversion of liquor is their failure to realize that the year 1921 hardly affords the right basis to use as a comparison. For that year represents one of the most severe industrial depressions in this country, marked by some 4,000,000 or more unemployed; while 1926 was a record-breaking year in industrial production. In addition, as already explained, our knowledge of how to use alcohol for industrial purposes has been greatly increased in intervening years and many new fields have been developed to large proportions.

It was inevitable, however, that the bootleg traffic would attempt to get hold of alcohol for its purposes by starting bogus factories or securing it through middlemen. With the huge profits from bootlegging, they have been able to employ skilled chemists to find formulæ for recovering the alcohol from its denatured form, and have led the technical section of the United States Prohibition Unit a merry race in this respect.

Dr. J. M. Doran, formerly chief chemist of the Prohibition Bureau, and recently promoted to Prohibition Commissioner, has made a detailed study of each of the uses of alcohol and calculated the probable amount diverted to illegal purposes. He has frankly stated that in 1925 it was probably 10,000,000 and perhaps a maximum of 15,000,000 wine gallons,[3] from which should be deducted the loss in manipulation and redistillation, and the amount of

[3] U. S. Senate Committee, *Hearings,* Vol. II, pp. 1309-1315.

spirits seized by prohibition agents. Even if reduced by two or three million gallons for these causes, the quantity was so enormous that, if translated into whiskey of about 50 per cent alcohol, it would make perhaps 200,000,000 pint bottles of this beverage. While the figure represents a maximum, it is far too high to be comforting, and needs no exaggeration to call attention to the problem it presents.

The *New York Times* of June 4, 1927, carried a column to the effect that in the week ending May 21, some 40,000 cases of liquor had been smuggled into Detroit from Canada. This is not the only point through which liquor is smuggled and Canada is not the only country from which liquor comes. Nor have moonshine liquor and home distilling been reduced to insignificance. The indications are pretty strong that those determined to drink distilled liquors are getting it.

Nevertheless, when all these amounts are added up, there is still reason to doubt if the amount available and consumed approaches anywhere near what would be the consumption of liquor today if it had proceeded on the pre-prohibition rate shown in the year 1900-1914, or even if it is near the 1914 figure. Although the latter year was one of depression, it showed a production of over 103,000,000 gallons of whiskey, rum, gin, and brandy, aside from the production of pure and denatured alcohol.[4] Assum-

[4] It should be remembered that formerly there were many patent medicines, such as tonics, bitters, special preparations for particular ailments and some that might almost be classed as

ing that anywhere up to 15,000,000 wine gallons of industrial alcohol are diverted, it takes a huge amount of rum-running and home distilling to make up the difference. Great as the traffic is, we doubt if the total approaches the amount of liquor sold when every saloon peddled it freely and everyone could buy all he wanted without fear. There are no authoritative figures, however, which would make our assertion more than a guess, and the reader may, therefore, incline to an opposite opinion without much danger of being disproved.

The chemists and enforcing authorities of the Prohibition Bureau are wrestling with the diversion problem, and they believe they have already reduced the proportion of the diversion considerably. Indeed, in November, 1926, General Lincoln C. An-

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elixirs, which contained a large proportion of alcohol. The results of an investigation made by the Massachusetts State Board of Health in connection with its work on food and drug inspection, and published in the Board's Twenty-eighth Annual Report (1896, p. 615) show that the amount of alcohol in these patent medicines ranged from 6 to 47.5 per cent by volume. In 1899 the Committee of Fifty authorized an investigator to make an inquiry in the drug trade as to the types of patent medicines sold as tonics and bitters and of those recommended as "temperance drinks," and also of the sales of these preparations in the six New England states. The list published by the Committee (*Physiological Aspects of the Liquor Problem,* edited by John S. Billings, Chairman of the Sub-Committee on the Physiological and Pathological Aspects of the Drink Problem, Boston, 1903, Vol. II, pp. 344-347) is a most illuminating one. Among the most widely distributed medicines, Drake's Plantation Bitters contained 33.2 per cent of alcohol by volume, Boker's Stomach Bitters 42.6 per cent, and Greene's Nervura 17.2 per cent. Among the "health drinks," Paine's Celery Tonic contained 21 per cent of alcohol, Ayer's Sarsaparilla 26.2 per cent, and Hood's Sarsaparilla 18.8 per cent. Large sales were reported of some of these, as, for example, Ayer's Sarsaparilla, of which it would appear that at least 300,000 bottles were sold annually in Massachusetts alone.

drews felt hopeful enough to say he was satisfied that the end of the diversion of industrial alcohol into illicit channels was in sight. In fact, 1927 is expected to show a considerable measure of reduction in diversion and a corresponding difficulty in patrolling the borders against smuggling.[5]

THE PROBLEM OF POISON LIQUOR

The problem faced by the administration is to enforce the injunction of the national prohibition act "to render the alcohol or any compound . . . unfit for use as an intoxicating beverage," without choosing at the same time a denaturant that will prove a burden and expense to the legitimate industries. It has been the policy of this country to encourage the development of fuels, dyes, and similar industries using alcohol, and since 1906 industrial

[5] The *Christian Science Monitor* carried the following news item on June 3, 1927:

"CLEVELAND, O.—Elimination of the bootlegger was seen here at the convention of the American Institute of Chemical Engineers, as the result of the development of 'aldehol,' a new denaturant developed by Prof. J. H. James of Carnegie Institute of Technology.

" 'We have every reason to believe this denaturant is absolutely beyond tampering,' Professor James told the delegates. 'It has a wide boiling point, and so far all attempts to distill alcohol out of it have been useless. Even if it was possible to distill it, the taste and odor are so offensive it would be impossible to use in any drink.'

"The Government has recently adopted it as a standard for makers of alcohol, it was explained, and it will soon be in use at all alcohol manufactories."

It should be borne in mind, however, that aldehol is used only in completely denatured alcohol, while the principal sources of diversion are believed to be found among the various liquids made from formulæ involving specially denatured alcohol.

alcohol has been tax-free, as against the heavy excise taxes on distilled spirits and beverage alcohol.

Dr. J. M. Doran, when chief chemist of the Prohibition Unit, explained the reason for using methanol (wood alcohol) as a denaturant. He stated:

> There is no doubt in the mind of any well-informed chemist that the long-standing use of methanol by all countries is based on sound scientific principles. Being closely related chemically to ethyl alcohol (ordinary alcohol), having a boiling point only slightly below that of ethyl alcohol, and having the physical properties closely resembling ethyl alcohol, it is a substance that cannot be easily removed.
>
> It is not employed because of the fact that methanol as such is commonly known to be a dangerous liquid to consume and, therefore, that physical harm will result to the drinker, but because of the fact that the denaturing grade of methanol carries the distinctive odorous compounds that by their characteristic odor and taste at once disclose to the individual the patent fact that the mixture or liquid is unfit for consumption. The fact that methanol forms constant boiling-point mixtures with ethyl alcohol, and if redistillation is attempted carries over with it in the distillate these odorous compounds, discloses the chief reason for its world-wide employment as a basic denaturing agent.[6]

In fairness to the government chemists, therefore, it should be realized that they are not seeking to

[6] Letter from the Secretary of the Treasury, on "Denaturization of Industrial Alcohol," 69th Congress, 2d Session, Senate Document No. 195 (1927), p. 135.

poison anyone, but only to render industrial alcohol unfit for beverage purposes by making it difficult to separate drinkable alcohol by illicit distillation. The substances which happen to be the most effective denaturants are methanol (wood alcohol), kerosene, benzol, and pyridine, which are poisonous. But the law requires a skull and bones label, to warn the person who might attempt to drink such liquor. The percentage of wood alcohol required as a denaturant is not abnormally high, being, in fact, less than the proportionate quantity required in England, Canada, and other countries. Until some genius hits on a formula that removes the possibility of diverting industrial alcohol for use as a beverage and has the added virtue of not injuring anyone who insists on drinking it, denaturing of alcohol will remain one of the great problems of prohibition enforcement. For the present, to accomplish the first of these purposes would be considered achievement enough.

The principal producers of wood alcohol and some of the large users of denaturants are quite worried over the possibility that the hue and cry about deaths from poisonous liquor caused by government formulæ may cause a change to more intricate and expensive formulæ, or the abolition of wood alcohol as a denaturant, and thus make legitimate trade the goat. Alcohol in conjunction with methanol sometimes makes a better solvent than alcohol alone. That a mixture of this kind is, for example, best for dissolving shellac and gums used in varnish is

evidenced by the fact that some concerns buy alcohol with a higher proportion of methanol than the law requires.

There are other important reasons why the manufacturers are anxious to keep wood alcohol as a denaturant. Many patented formulæ are built upon it. Furthermore, alcohol so denatured is difficult to redistill, and this reduces the policing problem. Employees do not drink it and do not steal it, and bootleggers are not particularly interested in it. But if denaturants of a non-poisonous kind were used, a military corps would be necessary to protect the 10,000 gallon car lots arriving in the yard and concerns would have to post guards at every stage of their processes in order to keep liquor from being filched. This would introduce new problems of administration and add a heavy burden to the cost of manufacture.

The attitude of the trade is well expressed in a periodical, *Chemicals,* published in New York, which on May 9, 1927, stated:

> Alcohol is more than an illicit beverage; it is also an essential raw material in chemical processes. If any remedies proposed should affect our carefully constructed denaturization formulae, surely the chemist, both scientific and industrial, has a right to be heard, . . . The chemist remembers that methanol has been the standard denaturant for over seventy years in Europe, and twenty years in America. Despite earnest search for a substitute, it has stubbornly held its place as the premier denaturing agent, satisfactory to government and in-

dustry alike. Its odor is unmistakable, it cannot be readily removed from ethyl alcohol, and it does not interfere with industrial processes. Even the new product—aldehol—needs methanol as a carrier.

The importance which poisonous alcohol derives is not from the number of deaths caused directly by it, though this, of course, deserves attention, but from the effects on those who are consuming it unknowingly. These people may be storing up small quantities of wood alcohol [7] and undermining their health without having any realization of it. As far as the actual number of persons whose death is officially classified in the U. S. Census as due to wood or denatured alcohol poisoning, there were only 182 in the whole country in 1925, and the rate per 100,000 of estimated population, which was 0.2 in 1925, has remained almost constant since the peak year 1920, when 359 deaths were so classified. The figures are given in detail, along with other facts relating to mortality from alcoholism, in the Appendix.

[7] A representative of the industrial alcohol interests who has read this chapter in galley proof maintains that completely denatured alcohol is now practically never diverted to beverage purposes. We submit this comment for what it may be worth.

CHAPTER IV

NEAR-BEER AND REAL BEER

ONE of the great speculations before prohibition was what people would drink instead of beer. Some thought that since the brewing industry catered to thirst, most of the brewing plants and equipment would soon be busy making other forms of drink.

It should be noted that, of the alcoholic beverages consumed in this country before prohibition, beer was over 90 per cent of the total volume, distilled spirits about 7 per cent, and wine about 3 per cent. Hence, a study in the change of consumption will be confined, for the present, to the demand for near-beer as a substitute for beer.[1]

[1] It is interesting in this connection, and not generally known, that the one-half of one per cent standard had its origin long before the period of national prohibition. The standard was not adopted to determine the actual boundary line of intoxication, but as an arbitrary division between a beverage which should be considered subject to tax as a fermented liquor and that which should be exempt, as an unfermented beverage. After some investigation, the Bureau of Internal Revenue came to the conclusion that under the processes then in vogue it would be wise for taxing purposes to put the dividing line at one-half of one per cent of alcohol. This decision was not opposed, but welcomed, by a large proportion of the brewers, since they wished to have practically all beers of varying contents of alcohol subject to the same tax, and thus not bear a discriminating burden. Later the brewers' own arguments for the one-half of one per cent standard was used against them when the Volstead Act came up for consideration.

Near-beer was regarded in many quarters as the logical successor to real beer. Of course, there were not lacking those who pooh-poohed the idea that a vigorous American people would ever take to near-beer, but there were others who declared with even more confidence that it would be the brewers' salvation. This more optimistic group had ample reason to be hopeful. Near-beer was not a new product at the time of national prohibition. Breweries had experimented with its sale for decades, in the localities where real beer had been prohibited by state laws or local option. And the success with such products in pre-prohibition days lent every encouragement to the belief that prohibition would not be such a blow to the brewing industry as some imagined.

Consider, for example, the striking experience of the Anheuser-Busch Company. As early as 1916, the company had prepared for the possibilities of prohibition by bringing out a non-alcoholic beer, made by a special arrested fermentation process, called Bevo. It became popular over night. We have it direct from the firm that:

> Within sixteen months we were shipping it in quantities equaling the earlier maximum shipments of our original Budweiser beer. In that short period our volume equalled that which came only after twenty years of effort. Agents offered as high as $10,000.00 premium for the right to sell Bevo in a single county; people named their pet dogs Bevo, and the name and the beverage became nationally known.

Until prohibition came, the corporation never caught up with the demand for this non-alcoholic beer, and three cars of Bevo were shipped for every four cars of beer. Noting the tremendous popularity of the non-alcoholic cereal beverage, the company prepared for the added business; and when national prohibition arrived, it was ready with other non-alcoholic cereal beverages, manufactured through the dealcoholization process.

Events during the first six months of prohibition were even more wildly encouraging. The demand for the non-alcoholic beers was little less than remarkable, and Mr. Busch, son of the founder of the firm, and his directors had visions of a volume of business only slightly smaller than before prohibition.

Within six months after prohibition became effective, Mr. Busch and his associates had a rather rude awakening—as did many other brewers. The Company's present production of near-beer is only 10 per cent of its former output of real beer. The reasons for its failure to make a success of near-beer are also the reasons why the other brewers did not make a go of it. These reasons are explained below, and in further detail in Chapter XVIII. Before considering these, it is necessary to present certain facts.

HOW NEAR-BEER IS MADE

Few people know how near-beer is actually made. Near-beer is a further step in the making of real

beer. To secure near-beer, it is necessary first to make real beer; then by reheating, to vaporize the alcohol in excess of one-half of one per cent until near-beer is produced. This reheating adds considerably to the cost, aside from the fact that the process requires the installation of new equipment. A much larger proportion of the beverage is put up in bottles, so that a rearrangement of space facilities becomes necessary. One plant, reporting on the costs of removing parts of its keg department machinery, such as washing machines, rackers, etc., in order to give more space to the bottling department, shows that this involves no small expenditure. In addition, manufacturing costs in this industry are higher today than in 1919. According to one large brewer, the manufacturing cost of near-beer is almost double that of real beer.

If the vaporized alcohol remaining from the process of making near-beer is to be made into a saleable form, special mechanisms must be installed. As such changes and equipment are expensive, there must be a considerable sale of near-beer to justify the outlay. Once this recovered alcohol is manufactured into something, such as toilet water or rubbing alcohol, it belongs to a different trade and must be marketed among firms different from retail beverage dealers. Hence, there is substantive truth in the assertion of one brewer that the production of cereal beverages is "an entirely new business, manufactured under an entirely different process and marketed in quite a different manner and to a

new clientele." Some firms, such as the Narragansett Brewing Company, of Providence, R. I., do not brew their own near-beer, but purchase it from other breweries and market it as an accommodation to the trade.

Nevertheless, the construction and layout of brewery plants are probably better adapted to the production of near-beer than to any other product. The investment in equipment and the changes in methods required to manufacture this beverage would therefore be incidental if a sufficient volume of business could be developed to justify the capital expenditure. What has been the country's experience with regard to near-beer?

NEAR-BEER CONSUMPTION SINCE PROHIBITION

We have secured the facts of near-beer production in two ways. First, we have the official figures from the annual reports of the U. S. Bureau of Internal Revenue for near-beer production for the country as a whole, presented in Table IX. Second, we have made a survey of the output of a selected list of large brewers whose trade name and other advantages might have given them an experience different from that of the trade as a whole. The statistics on this may therefore be regarded as rather conclusive.

Here we see a decline in 1926 to little more than half of the production of near-beer in 1921. The proportion this bears to the former output of real

TABLE IX. PRODUCTION IN THE UNITED STATES OF CEREAL BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL (NEAR-BEER) 1921-1926

(U. S. Bureau of Internal Revenue, *Annual Reports*)

Year Ending June 30	*Gallons*
1921	285,825,830
1922	196,781,781
1923	163,329,982
1924	151,606,909
1925	158,676,417
1926	150,522,077

beer will be considered later, and is also significant.

The replies from individual brewers, as secured in our own survey, are not encouraging. The Pittsburgh Brewing Company, making approximately 700,000 barrels of beer in 1919, had an output of 21,000 barrels of near-beer in 1926. Christian Feigenspan, of Newark, N. J., made 482,377 barrels of beer in 1919, and only 12,690 of near-beer in 1926. The John Hauck Company, of Cincinnati, producing over 280,000 barrels of real beer in 1918, sold only 13,000 barrels of near-beer in 1925. The Fred Miller Brewing Company, of Milwaukee, Wis., has an annual sale of about 20,000 barrels of near-beer, as against 400,000 barrels in 1919. We have already cited the experience of Anheuser-Busch. Table X presents the information more fully.

Of these twenty-five largest brewers shown on the list, the proportion of near-beer produced to former output of real beer ranges in twenty-three instances from 2 per cent to 33 per cent; one company makes just as much as before, and one twice

TABLE X. PRODUCTION OF NEAR-BEER BY SOME OF THE COUNTRY'S LARGEST BREWERIES IN 1926, COMPARED TO PRODUCTION OF REAL BEER BY THE SAME CONCERNS IN 1918-1919

Location of Plant	Near-Beer Produced in 1925-1926, as Compared with Amount of Real Beer Produced in 1918-1919 *Per Cent*
Erie, Pa.	2
Providence, R. I.	2
St. Louis, Mo.	3
Pittsburgh, Pa.	3
Newark, N. J.	3
Milwaukee, Wis.	5
Akron, Ohio	5
Cincinnati, Ohio	5
Detroit, Mich.	5
Ogden, Utah	10
St. Louis, Mo.	10
New York City	12
New York City	15
New York City	15
St. Paul, Minn.	15
Brooklyn, N. Y.	15
Chicago, Ill.	16
Brooklyn, N. Y.	20
Wilkes Barre, Pa.	20
Philadelphia, Pa.	20
Minneapolis, Minn.	25
Milwaukee, Wis.	33
Philadelphia, Pa.	33
Chicago, Ill.	100
Brooklyn, N. Y.	193

as much. Omitting these two exceptions, which we shall discuss in a moment, our investigation verifies in a general way the estimate of the secretary of the U. S. Brewers' Association that, on the whole, brewers making cereal beverages have averaged not more than 10 or 12 per cent of their former output. In 1914, the country's production of real beer was 2,051,873,663 gallons, in addition to which some

near-beer was also produced, of which no separate record seems to be available. In 1926, the output of near-beer was only 150,522,077 gallons, or seven per cent of the 1914 production of real beer.

WHY NEAR-BEER CONSUMPTION HAS DECLINED

In discussing the anticipations of the Anheuser-Busch Company, it was mentioned that at the outset the firm had visions of a volume of sales only slightly smaller than before the adoption of the Eighteenth Amendment, but that it soon learned that this was a pipe dream.

Two main reasons are given by this firm, as well as by others, for the decline in the near-beer business. In the first place, it complains of the ruinous effect of unfair competition with real beer, made in defiance of the law. It has been mentioned that the making of near-beer requires the dealcoholizing of real beer. On every side, however, one hears that this later stage, in which the excess of alcohol is supposed to be removed by vaporization is, in fact, not carried through, with the result that in many of the breweries supposedly making cereal beverages, real beer is manufactured and made available to "speak-easies" and other outlets. These violations are an exasperation to the honest manufacturer, because in the extent to which they exist, they substantially reduce the field for near-beer.

Then, too, there are the wildcat breweries. The secretary of the U. S. Brewers' Association writes:

"In a number of brewing centers, the brewers who were forced to the wall disposed of their plants through receivers' sales to new people, and in turn these plants found their way into the hands of bootleggers. The latter, using their graft connections, were able to make and sell real beer. The volume of this is, no doubt, exaggerated, but it has been sufficient to cripple the trade of the cereal beverage manufacturers."

George W. Eads, in charge of publicity and investigation for the Anheuser-Busch Company, has so interestingly revealed the trials and tribulations of the world's largest brewery in its undisputably honest effort to expand the legitimate trade, that we quote his letter:

Through the corporation's own traveling representatives, and its 2,000 wholesale dealers, it learned that the entire country was being flooded with products prohibited by the prohibition law. A considerable number of smaller breweries changed hands, for considerations of a fraction of their original value, and the new owners found it easy to make arrangements for their illegal operation in partnership with politicians—on a profit-sharing basis, of course. This soon grew to such enormous proportions that the sale of lawful cereal beverages was practically killed. The largest Chicago brewery was driven into bankruptcy trying to follow a policy similar to our own, and many of the other larger breweries of the United States, whose officials undertook to coöperate with the Federal Government in the impartial enforcement of the law, met a similar fate. And that is when the writer of

this letter came into the picture. I was employed by Mr. Busch to coöperate with the Federal Government to get a fair administration of the law for the protection of lawful business, and devoted almost two years' time to that effort. This coöperation was undertaken upon the invitation of the U. S. Commissioner of Internal Revenue, then the Chief Prohibition Enforcement Official.

Illustrations of this type of complaint will demonstrate its gravity. A Pennsylvania brewer claims that: "The near-beer proposition has amounted to practically nothing. This is due to the fact that we are located a short distance from the Canadian border, which makes it very convenient for the smuggling of high powered beer and ale from Canada. In addition to this, there is a large available supply of spiked beer [near-beer to which alcohol has been added]." A Detroit brewer asserts: "We still manufacture small quantities of beer, but the production and consumption have gone down to about five per cent or less of our 1919 production, owing to the fact that great quantities of Canadian malt liquors are coming across the river at Detroit daily, without being molested by the prohibition officials." Another brewer claims that the market is seasonal or irregular because it varies with the seriousness of law enforcement at any particular time.

Encouragement has come, however, in the strengthening of the arm of the government through the establishment, in 1926, of a new Brewery Unit which appears to be taking up the matter of viola-

tions in all sincerity. There is a nominal tax now imposed on cereal beverages for the purpose of giving the U. S. Government the legal power to investigate a brewery without a search warrant. From many quarters in the trade, praise for the recent activities of the Brewery Unit at Washington has been expressed, and the secretary of the U. S. Brewers' Association, in a letter to the writer, claims that some good results of the greater pressure of the Government are already becoming manifest.

Home brewing of beer is also a factor, and with this prohibition officials will not be able to cope very successfully. The only hope here is competition from the legitimate industry as will shortly be explained.

THE BREWERS' TACTICAL ERROR

The brewers themselves are also at fault. Many of them imagined that real beer would soon be legitimate again, and did not take near-beer seriously enough. It seems that the brewery industry did itself a great deal of damage immediately after prohibition by flooding the market with cheap and tasteless near-beers, whose odor alone was often repellent. Public confidence was lost. Some of the brewers have confided to the author their belief that if the industry had concentrated on producing a palatable product of high quality, the habit of beer drinking might have been retained by many more people, and new converts won among total abstainers.

One large New York brewer puts it as follows: "Had the brewers immediately upon the advent of prohibition pooled their efforts and money for the launching of a well thought out advertising and educational campaign on the advantages and high qualities of near-beer products, we perhaps would not be suffering such small sales. Prohibition has caused most people to lose their taste for fine alcoholic products, having become accustomed to drinking bootleg beers, whiskeys, etc., all of which are of a far inferior grade."

Not all of the brewers have fared badly under prohibition, and those who have done well attribute it to causes that are significant. In presenting the results of our survey of large breweries, it was stated that one firm is at one hundred per cent production, and that one other has actually doubled its output.

The reasons for their success are practically the same. John F. Trommer, Inc., of Brooklyn, N. Y., is the concern that doubled its output since prohibition. Instead of waiting for real beer to become legal again, it has bent all its efforts upon the production of a high grade malt near-beer that would regain lost public interest. By putting the highest class of materials into its product, by keeping it in kegs instead of bottles, making it unnecessary to pasteurize it, by seeing that the retailers serve it well iced, and in other ways, the company has made its drink extremely popular in the metropolitan district. Already, with the company's aid in some cases, hundreds of near-beer dispensers called "Brass Rails,"

closely resembling saloons, have sprung up in New York City; and favor is being won rapidly for the new type of sandwich-bar beverage.

The concern which has brought its production to the same level as that of real beer in 1919, by following a similar policy, is a large brewing company of Chicago. It states: "When prohibition took place we had decided to remain in the brewing business, going on the theory that there will be room for a few breweries who will produce a palatable legal beer. We have succeeded in producing an article which is very popular wherever sold." The success of the third concern, located in New York, whose production is rapidly increasing, illustrates that the possibilities of popularizing near-beer are not yet lost. It states, in a confidential letter: "We have now resorted to the use of imported hop and the finest malt in the manufacture of our Special Brew, with the hope of producing the most palatable beverage possible. Within the past year, the public sentiment toward near-beer has greatly increased in favor."

FUTURE OF NEAR-BEER

There is thus some hope that if the brewing industry will not stake all its chances upon the repeal of prohibition but, in the meanwhile, put its ingenuity into the production of tasty types of near-beer, some of the lost ground may be regained and a substantial expansion of volume be secured.

It may even make inroads on home brewing,

which, frequent as it may be, is greatly exaggerated in importance and is successful in only a small proportion of the cases in which done. Home brewing requires mechanisms and adjustments and efforts disproportionate to the results secured, and though probably extensive today, it has not won its place so much as to make it impossible to wean some of the demand back to a palatable near-beer. Nevertheless, near-beer is not beer and it alone will probably never approach the former volume of production of real beer.

This has left an enormous plant and equipment, not used in beer production, which had to be turned into other uses, sold, or left idle. What the industry has done in the attempt to salvage this capital investment by turning it to other productive uses, therefore becomes a matter of considerable interest, and we shall deal with this in a later chapter.

We may ask first, if near-beer has not slaked the thirst that was satisfied by real beer, what has? Near-beer was not the only alternative. Have people been drinking more ginger ale, more sodas, more tea and coffee, more milk, more of other beverages? These are some of the questions now to be considered.

CHAPTER V

BEVERAGES SUBSTITUTED FOR BEER

WHEN in the old days a man was seen entering a saloon, especially if he was not alone, it was not proof perfect that his purpose was to imbibe an alcoholic beverage. In a good many instances his innocent intention was to satisfy a parched thirst with celery tonic, sarsaparilla or ginger ale, or perhaps even a glass of milk. The good saloons kept a wide variety of these "soft drinks," and kept them in more palatable form than the average soda store. There were probably many people who thus got the habit of drinking beer who had no strong attachment for it. Did they go back to the "soft drinks" after prohibition? Did others accustomed to beer change to such drinks?

We have seen that the production of near-beer in 1926 was only 7 per cent of the output of real beer in 1914. Hence, if near-beer did not, in more than a fraction of the cases, inherit the demand for a satisfying beverage, what did?

In order to secure answers to this question, we have considered the principal types of beverages formerly sold in saloons and soda fountains. We have examined the statistics available, which are not conclusive, and have corresponded widely with the

large manufacturers of soft drinks, with trade associations, and with others in an authoritative position to speak.

The most significant conclusions that emerge are first, the surprising fact that milk has become one of the principal substitutes for beer in the workingman's lunch; that root beer, Coca-Cola, ginger ale, and other carbonated beverages have been very favorably affected by the cutting off of the supply of real beer; that some pure fruit drinks, such as those made from oranges, have probably benefited, but that grape juice has not been affected; that tea consumption shows no evidence of increase, but that coffee consumption perhaps does. It is also significant that, summarizing it all, we can by no means account for any large proportion of the total sum of money formerly spent in saloons.

MILK CONSUMPTION SINCE PROHIBITION

There has been a huge increase in the quantity of milk consumed in this country during the past few years. As estimated by the U. S. Department of Agriculture, milk for beverage and household purposes produced in 1917 amounted to 36,500,000,000 pounds, while by 1924 it had risen to 54,325,800,000 pounds,[1] or almost 50 per cent more, an increase far exceeding that in population. Prosperity and increased advertising of the food values of milk partly

[1] Figures from the Department's *Yearbook of Agriculture* for 1926, p. 1063, and from correspondence.

explain this marked increase, but do not, in the opinion of persons in official position, account for all of it.

That prohibition has been an important factor in promoting the popularity of milk, is a view supported by every study and survey of the milk question made, and by every authority with whom the writer has corresponded. Those well-informed in this field are not merely confident but emphatic on the matter. An example is the reply of the executive secretary of the International Association of Milk Dealers: "There can be no denying the fact that the cutting off of beer has diverted a great deal of thirst to the drinking of milk." Similar information was secured from the U. S. Department of Agriculture and other government departments.

The consensus of opinion of the people best informed in this matter is admirably brought out in a nation-wide questionnaire survey, undertaken by the Illinois Agricultural Association, the results of which were made public in April, 1926. Fifty-one leading dairy experts employed as heads of dairy departments of agricultural colleges, agricultural agents of railroads, managers of coöperative milk distributing agencies, and milk dealers answered the questionnaire, which was sent out by the director of the Association's department of dairy marketing.

Of the 51 replying, 33 definitely stated that prohibition has had an effect upon the increasing consumption of milk by the American public, 7 said "no" and 11 were non-committal. But even those

who said "no" in some cases claimed some incidental result, such as the increase in the consumption of buttermilk. Hence, the Association's report states emphatically, as the first sentence of its release to the press: "Prohibition was an important factor in the 27 per cent increase in milk consumption which occurred between 1918 and 1924."

The most significant explanation brought out in the Illinois Agricultural Association Report, and in several other surveys concerning the effect of the Eighteenth Amendment on milk consumption, is the observation of the widespread use of milk by the workingman as a substitute for beer. "I think one-third of the increase is due to prohibition," stated B. F. Beach, assistant secretary of the Michigan Milk Producers' Association, at Detroit. "This is accounted for by the fact that in factories it is common practice for workmen to drink milk with their noon-day lunch, while in the pre-prohibition days it was a common thing to drink beer and eat lunch in a saloon near a factory." Similar testimony has been received from milk dealers and officials in milk associations in many other industrial centers, but must be omitted here for lack of space.

In 1926, Ethelbert Stewart, Commissioner of the United States Bureau of Labor Statistics, had a survey made of some of the large industrial plants around Chicago and Pittsburgh. His report, published in the *United States Daily* for August 20 and 21, 1926, indicates that a great deal of milk is drunk by the workers in steel works, machinery plants,

foundries, and elsewhere, and has been substituted, to a considerable extent, for beer.

That this is the case was borne out by comments made to the writer in various plants and on the results of the questionnaire survey sent to industrial concerns, described in Chapter I. Over 120 firms recorded their observation that prohibition had had a marked or noticeably favorable effect in popularizing milk among their employees. Many of these employers were against the Eighteenth Amendment individually. As an example, there was one, a large builder employing 600 men, who in filling out his questionnaire checked all items "no change" except milk, which he notes to be very favorably affected by prohibition. Among the firms supplying statistics was a large soap company in Cincinnati, which made an actual tabulation comparing the per capita consumption of milk in the employees' lunchroom in 1919 with that for years after prohibition. In the latter period the average was over two and a half times as much as in 1919.

This change to milk by noon-day restaurants is also noted by hotel authorities. In *Hotel Management,* a trade periodical, for February, 1925, an article by J. O. Dahl, service manager of the company publishing this magazine, entitled "How Eating Habits Are Changing," states: "Twenty-five per cent of all the orders for beverages in eating houses covered by my investigation called for milk. In all but a very few instances this milk was served in individual bottles and pasteurized."

ROOT BEER, ORANGE JUICE, GRAPE JUICE

Root beer has been consumed in immensely larger quantities since prohibition. The Charles E. Hires Company, the leading concern in this field, states: "As nearly as we can estimate, the sales of root beer have increased three to four times over since the advent of prohibition. Prior to 1919, competition in the field was not very keen. With the coming of prohibition several hundred brewers, bottlers, and liquor firms turned their plants over to the manufacture of soft drinks. We believe that all manufacturers of soft drinks agree that their business has been greatly increased on account of prohibition, although competition has become very much keener. Root beer seemed to be the soft drink most of them chose to manufacture."

Many saloon corners are now used for orange juice stands, and it appears that the consumption of oranges for this type of drink has increased a good deal since prohibition. But there seems to be no way of separating the proportion of the orange crop used for beverage purposes from that used as food. We have observed that since prohibition fresh fruit orange drinks have been very popular, and in New York alone hundreds of orange juice stands have sprung up. The opinion of the trade is that this is not due to prohibition, but that it was much aided by the abolition of the saloon because it was the least objectionable substitute to the man who preferred beer.

The common impression that the grape juice industry has prospered from prohibition does not seem to be borne out by statistics nor by first-hand facts supplied by people in the trade. We are informed by the president of the Welch Grape Juice Company that, while the consumption has been increasing, from a nation-wide standpoint the sale of this firm's product increased more rapidly in the ten years ending in 1913 than it has in any period before or since. The prosperity of this industry and the volume of its sales have depended in considerable measure on the price of the product to the consumer. This, in turn, has depended on the price of grapes, which have been abnormally high most of the time since prohibition, for reasons discussed in a later chapter. Of course, the industry has been growing, but the effect of prohibition does not seem clear.

COCA-COLA AND SIMILAR DRINKS

Coca-Cola and similar drinks sold at fountains have enjoyed considerable prosperity during these past few years, as public statements and financial reports amply show. A large company advertising widely has made statistical analyses of its sales which show how difficult it is to disentangle the increase of consumption due to such factors as advertising and greater purchasing power from the effect of prohibition.

This company operates in "wet" countries as well as "dry" countries. In the Province of Quebec,

where liquors, light wines, and beers are available under government control, and the population is largely foreign, its volume of sales and the increases in the volume of sales have been very much more marked than the volume of sales and the increases in volume in the Province of Ontario, which is "dry." Likewise in Cuba, where all forms of liquors are handled by every retail grocer, its volume of sales and the increases in business are very much more marked than in some "dry" areas. This only serves to indicate with how little confidence one can disentangle one factor in the growth of consumption of a commodity from the influence of numerous causes operating at the same time.

GINGER ALE, SIPHONS, AND OTHER "MIXERS"

Correspondence with such representative concerns as the Cliquot Club Company, Canada Dry Ginger Ale, Inc., Cantrell & Cochrane, Ltd. ("C. & C."), and many others, makes it clear that the market for ginger ale has widened enormously since prohibition. Among the large firms which wrote us is a well-known Boston concern which submits the following statistics of cases of ginger ale it has sold:

Year	*Cases Sold*
1925	456,000
1923	437,000
1921	374,000
1919	289,000
1917	287,000
1915	223,000
1913	223,000

As against an increase in this firm's sales of 30 per cent from 1913 to 1919, there was an increase of 58 per cent, or almost twice as much, between 1919 and 1925. This concern states: "If beer became readily available, its restoration would have temporarily a devastating effect on our business."

However, there is considerable difference of opinion among the manufacturers on this point. Many are inclined to ascribe the great prosperity of the industry to the improved quality of the product, the greater appropriations for publicity, the better directed advertising, and the increased purchasing power of the people. Moreover, some of those who give prohibition credit for the increase in sales also point to the need of a mixer or carrier for the highballs and cocktails still being made, whether with pre-war stock or with bootleg liquor.

The feelings of a good proportion of the trade may be illustrated by the comment of the president of the New Jersey Bottlers of Carbonated Beverages, as reported in the *New York Times* of January 21, 1927:

> Soft drink bottlers have found business so good under prohibition that they are determined to offend neither the "Wets" nor the "Drys" and let the fight go merrily on. In the first place, so much liquor is consumed under prohibition that there is a lively demand for carbonated waters for use in mixing highballs; and in the second place, so many have turned solely to soft drinks since prohibition that it would be foolhardy for the bottlers of carbonated beverages to offend either the "Wets" or the

"Drys" and thereby incur the danger of losing the business from either side.

The extent to which high executives with first-hand experience can view the same situation differently may be illustrated by the following: The clerk in charge of the beverage department at the Boston City Club reports a great falling off in the consumption of soft drinks due to the fact that in former days a great many members who did not drink liquor accompanied those who did drink and took some ginger ale or a similar beverage. As he expresses it: "The bar in the old days did a soft drink business with the total abstinence crowd because of the sociability features." On the other hand, an executive connected with perhaps the largest manufacturer of soft drinks in America, says that the increased volume of consumption of soft drinks may be attributed in large part to prohibition because prior to the Eighteenth Amendment many invitations to have a drink meant a hard drink, which invitations are now in a measure gratified by a soft drink.

DO PEOPLE DRINK MORE COFFEE AND TEA INSTEAD OF LIQUOR?

Those engaged in the coffee and tea business are said to have looked upon prohibition with great expectations. A typical statement, found in the *Tea and Coffee Trade Journal* early in 1919, is the following: "There will doubtless be coffee-saloons

established in the downtown business sections where people congregate during the business hours of the day. Some will doubtless take advantage and drink a cup whenever they feel a 'thirst' coming on them." The same optimism was expressed concerning the consumption of tea. One firm of tea brokers took the stand that: "With properly directed effort, there is no reason why the consumption of tea should not be doubled."

The figures of coffee and tea consumption are helpful in this connection. The statistics available are those of the U. S. Bureau of Foreign and Domestic Commerce, which computes the net imports and calculates the per capita consumption. They are the basis of the following table:

TABLE XI. PER CAPITA CONSUMPTION OF COFFEE AND TEA IN THE UNITED STATES, 1896-1925

(*Statistical Abstract of the United States,* 1925, published by the U. S. Department of Commerce, p. 672)

Year	Pounds per Capita	
	Coffee	Tea
1921-1925	11.71	.83
1916-1920	11.20	1.04
1911-1915	9.65	.99
1906-1910	10.69	1.05
1901-1905	11.65	1.18
1896-1900	10.07	1.17

The table seems to indicate that the per capita consumption of tea since prohibition has decreased while the per capita consumption of coffee was

slightly higher in 1921-1925 than at any other period. The statistics follow an uncertain course, but it seems to be true that coffee has of late been somewhat more popular as a beverage—a result one might logically expect under prohibition.

It is, however, difficult to interpret the table. The years 1916-1920 show a consumption of coffee only slightly less than the subsequent period. If we ascribe this to war-time needs and to the beginning of prohibition under state laws, local option laws and national war-time restrictions, and use the years 1911-1915 as the typical pre-prohibition years, we find, nevertheless, that the 1916-1920 per capita is less than the per capita consumption of 1901-1905. While the author inclines to the belief that the increase of lunch rooms since prohibition, discussed elsewhere, and other factors have led to more frequent drinking of coffee in place of beer or liquor, the statistics show no marked change in that respect, although they do show a slight change. A survey among those in the coffee trade seems to indicate that the sentiment that prohibition has aided coffee consumption is rather general. On the other hand, an extensive study completed in 1927 by J. O. Dahl, a prominent food and hotel expert, whose findings are discussed in more detail in the next chapter, leads him to conclude that since 1917 there has been a reduction of 12 per cent in the amount of coffee consumed by patrons of hotels and the better restaurants throughout the country, and a 7 per cent reduction in the use of tea.

SUMMARY: SUBSTITUTE BEVERAGES COMPARED WITH FORMER LIQUOR CONSUMPTION

We wish it were possible to make a comparison of the amount spent for all these substitute beverages with the amount spent for liquor before prohibition. There are no reliable statistics whatever of the amount actually spent in saloons. The U. S. Census of Manufactures contains figures for "Value of Products" for distilled spirits, beer, and alcohol produced, but these are factory prices. In 1914, the value given for these products was over $665,000,000, equivalent at present price levels to well over a billion dollars, to which would be added an unknown amount for the value of cereal beverages then produced, and at least $75,000,000 for carbonated beverages and fruit drinks.

The cost of a keg of beer to the saloonkeeper is, of course, not an index of what was actually spent for that keg by the customers over the bar, for it had to bear its share of the burden of refrigeration, overhead, depreciation, taxes, wages, waste, graft, profits and other items in the economics of conducting a saloon. In Chapter VIII we make a guess as to what the patrons spent at retail on alcoholic beverages, but for the present we are considering only the value of products as reported by the manufacturers, amounting in 1914 to two-thirds of a billion dollars. Compared with this large amount, the "Value of Products" for bottled carbonated beverages, fruit beverages and miscellaneous prod-

ucts, given by the U. S. Census of Manufactures for 1925, is less than $170,000,000. If the value of cereal beverages (near-beer) is added, the total for 1925 reaches only $236,027,000. To this we must add an indeterminate amount for the increased consumption of milk, and perhaps also of coffee.

Such a comparison is imperfect, yet if set up against the more prosperous economic background of these past few years, indicates that we have by no means accounted for the whole of the huge demand for alcoholic drinks. Perhaps there are other things capable of acting as substitutes for liquor. We shall consider other directions in which some of the huge pre-prohibition thirst may have found satisfaction.

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CHAPTER VI

ICE CREAM PARLORS, CANDY STORES, TOBACCO SHOPS, AND CAFETERIAS IN THE VOLSTEAD ERA

WHEN in the old days a man was pressing some one to drop into a saloon with him, he did not have to limit himself to the offer of a drink. He could suggest a sandwich or at least a cigar, of which there was usually a good assortment. It is maintained in various quarters that with the abolition of the saloons, some of the sandwich and food business was transferred to cafeterias, and that some people smoke who used to drink. It is also claimed that the inability to get a drink has led many people to seek a similar stimulation in the purchase of sweets, such as candy and ice cream. The purpose of this chapter is to consider some of these possibilities.

ICE CREAM CONSUMPTION

That there has been a striking increase of ice cream consumption is borne out by figures on every hand. There has been a corresponding increase in the number of ice cream parlors. In Chicago, for example, the number of ice cream parlors licensed in 1918 was 2124; in 1925, the number was 4157.

Statistics for ice cream production were secured

from the National Association of Ice Cream Manufacturers, for the years 1916-1925. They are compiled in the following table:

TABLE XII. PRODUCTION OF ICE CREAM IN THE UNITED STATES, 1916-1925

Year	*Total Production in Gallons*
1925	322,729,000
1924	285,550,000
1923	294,900,000
1922	263,520,000
1921	244,000,000
1920	260,000,000
1919	230,000,000
1918	220,000,000
1917	210,000,000
1916	208,320,000

Examining these figures, we observe an increase in consumption, between 1916 and 1925, of over 114,000,000 gallons, or about 55 per cent, as compared with an increase in population of somewhat less than 15 per cent.

Is prohibition partly responsible? All authorities consulted say yes. In a bulletin prepared under the supervision of the U. S. Bureau of Agricultural Economics by the Agricultural Department of Cornell University, it is stated: "The remarkable expansion of the ice cream business since 1918 is due, in part, to prohibition and accounts for a large share of the increase in cream receipts in recent years." Dr. C. C. Slemons, Health Officer of Grand Rapids, asserts: "The great growth of the ice cream business is unquestionably due to the abolition of the saloon." And, indeed, the sale of ice cream was promoted by

the brewers themselves, who in numerous instances turned parts of their plants to ice cream production.

The National Association of Ice Cream Manufacturers calls attention to indirect effects of prohibition as a possible factor in increased consumption. Their communication to the writer, enclosing a valuable statistical study analyzing the relation of concentrated population and effective income to ice cream production, states, in part: "There is a direct relation between effective income of individuals in different sections of the country and the consumption of ice cream. Therefore, if prohibition has a tendency to increase the earning ability of the country, it would have this indirect effect on the growth of this industry."

CANDY CONSUMPTION

There seems to be a widespread impression that the candy industry is "the legal heir of John Barleycorn." Hudson Maxim, in his testimony at the hearings on national prohibition, at Washington, in April, 1926, asserted that this was due to an inevitable craving resulting from abstinence. He said: "Persons who deny themselves the use of alcoholic liquors and restrict themselves entirely to non-alcoholic beverages are nearly always liberal consumers of sweet drinks and are large eaters of starch and sugar, which they take for the stimulating effects and sense of well-being produced by the alcohol generated in the system." [1]

[1] U. S. Senate Committee, *Hearings*, p. 167.

This would lead one to suppose that the industry had benefited enormously from prohibition, but among responsible persons in the candy industry the idea that candy is the heir of John Barleycorn is considerably discounted. The answer from the secretary of the New England Manufacturing Confectioners' Association is typical of the attitude shown, in his assertion that: "I have been able to observe nothing in support of the theory that prohibition has increased greatly the consumption of candy. The increase does not appear to have been greater than the increase in population and in general purchasing power."

Turning for assistance to the U. S. Census of Manufactures, we can secure statistics only to 1914, and only in terms of value of product, not in pounds produced or some similarly standard unit. It is with some misgiving that we have prepared the following table, in which the second column represents a rough revision of the official figures in order to allow for increases in population and in prices. We admit that this revision cannot be taken very seriously. Nevertheless the figures as given have some value in showing an increase in the value of candy products manufactured and indicating also a probable increase of from 20 to 25 per cent in the actual production and consumption of candy.

The assertion that there is some transference in taste from a thirst for liquor to an appetite for candy is supported to the extent that there has been a considerable increase in candy consumption. From

TABLE XIII. CANDY CONSUMPTION IN THE UNITED STATES, 1914-1926

Year	Value of Products as Given by U. S. Census of Manufactures	Revised Figures (rough) to Allow for Population Increase and Changes in Price *	Net Per Cent of Increase over 1914
1926	$380,761,000	$195,000,000	27
1923	366,256,000	210,000,000	37
1921	313,998,000	185,000,000	21
1919	447,726,000	198,000,000	29
1914	153,685,000	153,685,000	..

* First the U. S. Census figures were corrected for population increases since 1914, viz., 7 per cent in 1919, 10 per cent in 1921, 13 per cent in 1923 and 18 per cent in 1926. Then changes in prices over 1914 taken into account amounted to 110 per cent for 1919, 48 per cent for 1921, 50 per cent for 1923 and 60 per cent for 1926. No claim is made that the resulting computation is more than an estimate.

several independent sources, such as from one of the largest steel companies, it was reported to the writer that workmen have been buying markedly more candy at the cafeteria counter. But how separate the possible influence of prohibition from the increase normally to be expected as a result of the greater freedom of expenditure in general during the past few years?

A year or so after the Volstead Act went into effect, the National Confectioners' Association made an investigation of the extent to which various allied industries had benefited from prohibition. According to this Association, the candy industry was placed sixth; the other five being savings banks, the soft drink industry, the ice cream industry, the moving picture industry, and the theaters, in the order named.

Walter C. Hughes, secretary of that Association, denies that candy consumption has been increased because of its use as a substitute for liquor. He writes:

We have had occasion from time to time to make investigations relative to the probable effect of prohibition upon the consumption of candy. Our conclusions may be briefly summarized as follows:

No doubt there has been an increase in the consumption of candy since the Volstead Act became more or less effective, but this is not due to the fact that certain individuals who formerly had the privilege of drinking all the liquor they wanted are now indulging in candy orgies, but because prohibition has resulted in increasing the consumption of all kinds of merchandise. Men who formerly spent practically all of their weekly wages on the corner saloons are now spending it for things which their families need and want. And after these things are purchased, they have enough money left to buy candy and ice cream. The candy industry has been benefited by prohibition for that reason, but only in proportion to that which other industries have benefited.

The increase in candy consumption may also be attributed to a very great extent to the fact that since about 1918, when the first nationally advertised candy bar was placed on the market, candy has been offered for sale in convenient five- and ten-cent packages, and has been distributed through more kinds of retail mediums and more varied classes of retail outlets than any other kind of merchandise. Prior to that year, candy for the most part had been sold in bulk or in fancy packages.

Therefore, I am firmly convinced that the increased consumption of candy is due to economic reasons and not to what might be called an abnormal appetite for liquor satisfied in candy.

Many people in the candy trade entertain a well-justified fear that an exaggerated idea of the benefits of prohibition to the industry may bring an excessive number of new firms into the trade, as has already occurred in part. This is well expressed in a letter from the secretary of the Southern Wholesale Confectioners Association, who says: "Our opinion is that the increase in consumption of sweets was not nearly so great as was expected. In fact, we consider this reasoning, that there would be an increase in consumption of candy, has injured the candy business, resulting in a scramble to get in by many firms who have brought the production capacity of the industry much above the consumption capacity, resulting in lack of profits and failures in some instances."

DO PEOPLE SMOKE WHO USED TO DRINK?

In the table on the opposite page, one may observe an enormous increase in the number of cigarettes consumed. There is, nevertheless, a question as to whether the inavailability of liquor has had any appreciable effect in influencing people who used to drink to turn to tobacco.

The consumption of cigarettes increased over 400 per cent in a decade, rising phenomenally from a

yearly average of less than 15,000,000,000 during the period 1911-1915, to well over 65,000,000,000 cigarettes during 1921-1925. But if prohibition had anything to do with it, why is there not a proportionate increase in the use of chewing tobacco and of cigars—items of predominantly male consumption? Instead, the figures for these show a decline. The sales may have been decreased somewhat by the fact that when the saloons were flourishing, it was frequently the practice for the abstainer, or the man who had "had enough," to take a cigar instead of a drink. The increases in cigarette smoking suggest the influence of the war on young men, the waning

TABLE XIV. LEAF TOBACCO CONSUMED IN THE MANUFACTURE OF CIGARS, CIGARETTES, CHEWING AND SMOKING TOBACCO AND SNUFF IN THE UNITED STATES, 1901-1925 *

Yearly Average of Leaf Tobacco Consumed

	Total Cigars, Cigarettes, Tobacco and Snuff (pounds)	Cigars (pounds)	Tobacco and Snuff (pounds)	Cigarettes (pounds)	Cigarettes Manufactured (number)
1921-1925.	645,500,000	151,279,000	295,948,000	198,233,000	65,462,917,000
1916-1920.	634,474,000	159,716,000	337,440,000	137,318,000	41,591,696,000
1911-1915.	549,474,000	153,560,000	341,659,000	54,225,000	14,818,111,000
1906-1910.	495,848,000	139,206,000	334,563,000	22,079,000	6,208,684,000
1901-1905.	435,194,000	124,411,000	298,339,000	12,444,000	3,234,745,000

* Based on Tables No. 757-759 of the *Statistical Abstract of the United States*, 1925, published by the United States Department of Commerce. Table No. 757, on leaf tobacco used, is the best index of the consumption in this country, although it includes some tobacco exported. The figures for the latter have not been deducted, in order to avoid certain complicating details and also because these exports do not appreciably affect the results presented. This may be seen in the fact that the export of tobacco has been declining in recent years (see Table No. 759). The figures in the last column, giving the number of cigarettes produced, are exclusive of cigarettes manufactured from imported tobacco in bonded warehouses, amounting, in 1925, to 6,094,228,868. Additions were not made to the column to allow for these cigarettes made from imported tobacco, as they were not readily available and would not, in any case, be of importance in the consideration of the matter at issue.

opposition of church organizations, the phenomenal spread of the smoking habit among women, and the intensified advertising and high-powered selling campaigns of the manufacturers and distributors. But the statistics are presented and the reader may draw his own conclusions.

CAFETERIAS AND THE ABOLITION OF THE SALOONS

In pre-prohibition days, saloons in a great many localities were quite generally dispensers of food. While in some cities this function was becoming unimportant, in others it was a most conspicuous part of the saloon's business. The higher class of saloons made a particular feature of good cooking, and the sign "Business Men's Lunch," with the daily menu on a large blackboard outside, attracted patronage. Almost all served sandwiches and other foods that went well with the beverages dispensed. Among saloons patronized by wage-earners of the lower economic strata, "free lunch" was an attraction conspicuously bulletined, and taken advantage of, too, to the limit of the bartender's patience.

Now it is known that saloons have quite generally disappeared and that numerous cafeterias of diverse sorts have become widespread. It is natural to trace a connection. Our purpose is to analyze the situation and see whether such a conclusion is justifiable.

First as to the facts. There is little doubt of the enormous increase of eating places. The Commissioner of Health in New York City stated that

20,000 eating establishments were under permit in his jurisdiction in 1926, as compared with 14,000 before 1920—an increase of 43 per cent. According to the U. S. Census estimates, the increase in population in New York City during this period was less than 6 per cent. Similar facts are true of a large number of other cities.

In addition, a canvass of the chief firms engaged in supplying cafeteria equipment shows a further increase in cafeterias maintained by industrial concerns for their employees. One of the largest cafeteria equipment houses, located in Chicago, reports that for a few years following prohibition a very marked increase in the number of industrial cafeterias took place.

Now as to the explanation. There can be no authoritative proof, only inference, that the closing of the saloons made for more eating places of the cafeteria type. Of course, there are reasons enough which would explain an increase in eating places aside from prohibition. Omitting the matter of expanding population, one can mention the increasing number of commuters, women shoppers, and visitors in the larger cities, and the greater number of tourists traveling throughout the country in their cars, as well as the growing proportion of women, married and single, employed in industry. Then there are certain inherent advantages in the cafeterias themselves, with their attention to sanitation, larger variety and better quality of food, appetizing cooking—often in plain sight of the consumer—

cheapness, and, of course, quick service. Then, too, with the restriction of immigration has come an intensification of the servant problem, leading people to eat outside more often. And, of course, the reasons for the establishment by employers of industrial cafeterias are numerous and quite independent of prohibition, though probably stimulated by the pressure of greater need.

Nevertheless, one cannot possibly get away from the fact that the departed saloons were places where some men ate regularly and a great many others occasionally. Can it be possible that hundreds or thousands of such places can be abolished in a city without augmenting the demand at other restaurants and lunchrooms? The writer made an enquiry about this matter among many people in a position to observe conditions.

There is some difference of belief concerning the better types of places, but the weight of authoritative opinion is to the effect that the cheaper grades of eating places catering largely to men, such as "sandwich bars," "coffee pots," "Automats," and the smaller lunch rooms have benefited from the patronage of people who formerly got free sandwiches, pretzels, and the like, in places where the profit was made on the beer. Dr. Louis I. Harris, Commissioner of Health in New York City, puts the abolition of saloons as third in a long list of causes explaining the increase in eating places. Dr. John P. Koehler, Commissioner of Health for Milwaukee, states: "I do not believe that there is any

question but what the closing of the old-time saloon has been responsible for the opening of many small lunch rooms in Milwaukee."

That prohibition has been an important factor in an observed change in eating habits during the past few years, is the conclusion reached by J. O. Dahl, a prominent hotel and restaurant expert, from a nation-wide survey completed in 1927. As the author of a recent book, *Restaurant Management,* and also the manager of the service department of *Restaurant Management* and *Hotel Management,* the following quotations from an advance copy of an article describing the survey, written by Mr. Dahl for *Sales Management,* are of interest here:

Nibbles are taking the place of bites. Salads and sandwiches are displacing steaks. While good old-fashioned restaurants close their doors, coffee shops, lunch rooms, and sandwich bars open at the rate of several thousand a year. . . .

Ten years ago meat was standard diet in every hotel and restaurant in the country. Many guests ate it three times a day. Now once each day is a good average. . . .

Whether or not one believes in the Eighteenth Amendment, we who deal in foods know that there is not only less heavy drinking, but that it has resulted in lighter eating. I clearly remember the large meat orders we served to drinkers who used to spend two hours a meal at our dinner table. Steak and chop houses existed for heavy drinkers. Even today we find that heavy meat eaters are usually consistent drinkers, very large men or outdoor workers who labor long and hard.

My Continental experience is interesting in that con-

nection. I was employed in leading hotels in France, Italy, Switzerland, Germany, Belgium, Holland, Scotland, and England. Our patronage was largely made up of Americans. Figures from our records in the hotels show that American guests now consume less alcoholic beverages per person than any other nationality. In one chain of fashionable hotels, it amounted to only 25 cents per day per person—and these were houses where the rates are high enough to keep out those with "beer incomes." In several hotels we raised the rate on rooms because liquor profits were no longer great enough to justify low room charges.

CHAPTER VII

HAS PROHIBITION INCREASED DRUG ADDICTION?

EVERY time some group arguing against prohibition wants to "jazz up" its case, it drags in something about the awful drug menace. Hence, the country has for several years been treated to assertions about alarming increases in drug addiction caused by prohibition. One can find this charge as early as 1920, in the year book of the U. S. Brewers' Association, and almost any day in a clipping from some newspaper. It has been repeated so frequently that one cannot blame the average citizen for believing it.

At the Senate hearings on national prohibition, in April, 1926, the "Wets" played up the drug menace. Congressman William S. Vare, of Pennsylvania, stated emphatically: "The increased use of narcotics throughout the Nation has been appalling." [1] A number of barley farmers in Wisconsin, petitioning for stronger beer, assert in their brief that: "If the Volstead measure would be amended so as to permit the manufacture and sale of 2¾ per cent beer, it . . . would no doubt . . . greatly reduce the use of the dangerous habit-forming drugs, such

[1] U. S. Senate *Hearings, op. cit.*, Vol. I, p. 129.

as morphine, cocaine, opium, etc., which is on a startling increase." [2]

Some people go further. They claim that even the propaganda for prohibition before the law was ever passed tended to increase drug addiction! Fabian Franklin, in his book, *What Prohibition Has Done to America* (1922), disregards the known studies on the personality make-up of opium addicts, and works out this most ingenious explanation of an alleged increase in the number of drug addicts:

> I submit that it is at least highly probable that one very great cause of this extraordinary and deplorable state of things is the atmosphere of reprobation which in America has so long surrounded the practice of moderate drinking. Any resort whatever to alcoholic drinks being held by so large a proportion of the persons who are most influential in religious and educational circles to be sinful and incompatible with the best character, it is almost inevitable that, in thousands of cases, desires and needs which would find their natural satisfaction in temperate and social drinking are turned into the secret and infinitely more unwholesome channel of drug addiction. (pp. 78-79.)

In the light of known facts published in the scientific journals about the causes of addiction, we may disregard this theory without comment. But what about the alarming statements of fact? And where do those who assert these facts get their information?

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[2] *Ibid.*, Vol. II, p. 1646.

Although we have examined all the reports and surveys published in the past decade, and consulted with authorities on drug addiction in New York, Washington, and elsewhere, we have not, for some unfortunate reason, been able to find even a pretense of statistical information which would support such assertions.

WHAT AUTHORITATIVE REPORTS INDICATE

The authoritative reports and surveys uniformly reach one of two conclusions. Most assert that there has been a decrease of addiction, and a few that there are no facts whatever which would indicate an increase. One of the latter denies that we can know the trend in either direction. We do not maintain that there has been a decrease in drug addiction, although the available information would seem to indicate this; but we do maintain that there is no basis whatever for any positive statement that addiction has been increased.

A rather prolonged effort to get at the facts resulted in the following conclusions: In the first place, there is no evidence whatever to show that in the nation as a whole there has been an increase in the number of addicts, which almost all the official reports and surveys proclaim a large decrease; in the second place, on the more immediate question of the relation of prohibition to drug addiction, they deny any reason for an increase. The facts they present would suggest a tendency exactly opposite to that alleged. The amended Harrison Narcotic Law of

1914, limiting the legal consumption of narcotic drugs to bona-fide medical treatment, and making strict regulation for controlling the quantity imported, manufactured, exported or used, became effective about the same time as the Eighteenth Amendment. Some authorities to be quoted are of the opinion that the rigid enforcement of the narcotic law, as against the lax enforcement of prohibition, has forced some addicts to give up drugs and turn to liquor; but all deny that prohibition has increased the number of drug addicts.

Indeed, some regard the claim as laughable. The curious thing is that the same people who assert that speak-easies are more numerous than saloons used to be, and that liquor is more freely available than in pre-prohibition days, also proclaim loudly that prohibition has forced the drinker to use drugs. The statements seem difficult to reconcile. To say that the confirmed drinker has been forced to change to narcotic drugs seems to imply that it is much easier to get narcotic drugs than to get liquor. The terms of the Harrison Narcotic Law and its enforcement are such that it is infinitely harder to get narcotic drugs. They are also a great deal more expensive. It should further be noted that in the administration of the drug laws, unlike the experience with liquor law violation, there is almost no social sentiment whatever to support the dope peddler or dope addict.

It is a question well deserving the study of competent authorities, whether the persons who now

overindulge in alcohol would change to drugs if all intoxicating liquor were cleared off the earth. There is a difference of opinion on this among medical authorities. There may be certain psychological instabilities of character among some drunkards which would lead them to transfer from one type of indulgence to another. But this is not the question which the propagandist considers. He asserts that prohibition has *already* swelled the total of drug addiction.

Narcotic drugs are principally of two kinds—those manufactured from opium and those manufactured from coca leaves. Morphine, manufactured from opium, is far more widely used and more habit-forming than cocaine, made from coca leaves, and the use of cocaine is said to be passing. The raw material for narcotic drugs comes entirely from abroad. Until May 26, 1922, manufactured drugs could be imported, but since then only crude opium and coca leaves have been permitted.

It is a rather astonishing thing, in retrospect, that until 1915, when the Harrison Act passed by Congress became effective, narcotic drugs could be bought freely in drug stores in all except a few states, as freely as epsom salts or boric acid. The passage of the Harrison Act did not at once rectify this situation. Amendments to the Revenue Act of 1918, becoming effective in 1919, provided for a tax on the product and required monthly returns of transactions from all importers, manufacturers, compounders, and wholesale dealers, thus introducing

strict accountability for the first time. It was not until February, 1920, that forms were furnished, and commencing with this date we begin to have effective control and administration of narcotic drug consumption. These facts are important in our discussion of the drug problem.

TREND OF KNOWN DRUG CONSUMPTION

The trend of drug addiction can be approached from several angles. One index is the amount of drugs imported. Long-time statistics are given in a study by Drs. Lawrence Kolb and A. G. DuMez, of the U. S. Public Health Service, in that department's *Public Health Report* for May 23, 1924. In one of their tables (page 14), the authors include the following figures for opium (over 9 per cent morphine) entered for consumption in the United States annually for several decades back.

Years	*Average Annual Consumption* (pounds)
1920-1923	144,805
1910-1919	366,054
1900-1909	480,009
1890-1899	513,070

Considering the increase of population in this period, shown in that report as rising from 68,000,000 to 106,000,000, the fact that there has been a great decrease in annual consumption suggests a corresponding decrease in drug addiction. This is aside from the fact that all importation of smoking opium

was prohibited by law in 1909. This decrease in the import of opium occurred during an era of local and state-wide prohibition, and is most marked since 1920.

We endeavored, however, to get the figures year by year for a shorter period covering the past decade and a half. It has been difficult to get the statistics on this. After painstaking efforts and a trip to Washington for the purpose, statistics of imports were secured, but we are still unable to get what is desired with regard to export statistics before 1920. For reasons previously explained, those engaged in the industry were not held to accountability before 1920, while, to make things worse, the Department of Commerce lumped narcotic drugs together with drugs as a whole in its export reports. Hence no export figures can be supplied.

Thus, in compiling statistics of drug consumption, it is impossible to present more than one side of the picture, viz.: imports. But that side is not without some significance, for if all narcotic drugs used are imported in the raw from abroad, and there has been a severe decline in the amount imported, there is a suggestion of decreased addiction. It is true that the factor of smuggled drugs must be taken into account. We shall consider this in a moment.

If we study Table XV in more detail, it may be seen that during the five years, 1911-1915, before the movement for state-wide prohibition had made real headway or war-time restrictions and national prohibition had any part, there was an average annual

TABLE XV. IMPORTS OF OPIUM AND COCA LEAVES TO THE UNITED STATES, BY FISCAL YEARS, 1911-1926

Year	Opium, Containing 9 Per Cent and over of Morphia (pounds)	Coca Leaves (pounds)
1926	107,748	262,671
1925	100,478	109,920
1924	87,344	208,862
1923	99,354	286,933
1922	135,093	33,080
1921	47,025	387,195
1920	628,979	634,356*
1919	345,514	795,074*
1918	157,834	1,059,484
1917	86,812	634,932
1916	146,658	947,537
1915	484,027	1,048,312
1914	455,200	711,564
1913	508,433	1,175,780
1912	399,837	1,179,540
1911	629,842	1,226,772

* Fiscal years of the U. S. Government are from July 1 to June 30, the period for which appropriations are made. The facts for coca leaves in 1920 and in 1919 are for calendar years. The six-month interval in 1918, from July 1 to December 31, which the column omits, was one of huge importation of coca leaves, amounting to 699,622 pounds. The facts were available only as given above, and were secured by correspondence with Colonel L. G. Nutt, Deputy Commissioner of Prohibition, in charge of the administration of the narcotic laws, as well as from the annual reports of the U. S. Bureau of Internal Revenue.

importation of 495,468 pounds of opium, while during 1922-1926, the average was only 106,003 pounds; likewise, as compared with average annual importation of 1,068,394 pounds of coca leaves in 1911-1915, an average of only 180,293 pounds were imported during 1922-1925.

Of course, we must take into account smuggled drugs. There has no doubt been a great deal more occasion for that since the restrictions that were

imposed under the Harrison Act came into force. But it takes a great deal of smuggling to account for so huge a difference as 1,281,566 pounds a year! In any event, who knows how much was smuggled? Those who claim that drug addiction has increased do not know any more about it than anyone else. All we wish to point out is that there is no reliable evidence available which would give any basis for their astonishingly sweeping assertions, while the known facts are strongly against them.

ESTIMATES OF THE NUMBER OF ADDICTS

It would help to be able to present a neat tabulation of the actual number of addicts in the United States year by year for several decades. That is an utter impossibility. The available statistics on this are, with a few rare exceptions, a series of wild guesses. On March 25, 1918, a special committee of investigation was appointed by the Secretary of the Treasury to estimate the traffic in narcotic drugs. Reporting on this subject in June, 1919, after a national survey, it stated frankly: "The extent of the commerce in narcotic drugs in the United States cannot be accurately estimated because of the fact that up until the present time the laws and regulations governing their sale and use did not make provisions for tracing these drugs from the importer to the ultimate consumer." [3] Nevertheless, it com-

[3] U. S. Treasury Department, Special Narcotic Committee, *Traffic in Narcotic Drugs,* report of a special committee of investigation appointed March 25, 1918, by the Secretary of the Treasury (Washington, Government Printing Office, 1919), p. 6.

piles a list of the number of addicts in the country, as estimated at different times by various observers. The largest guess is for 1915, of 4,000,000 addicts; the smallest is for the same year and amounts to only 255,000 addicts! Without any more adequate statistics, the Committee makes its own little guess of about a million addicts.[4] We are quoting the authorities, however, because their views give the only available picture of the situation.

The most careful and plausible study of the subject is that mentioned before, by two specialists of the U. S. Public Health Service, Drs. Lawrence Kolb and A. G. DuMez. Their pamphlet, published in 1924, is called *The Prevalence and Trend of Drug Addiction in the United States and the Factors Influencing It.*[5] Their estimates, based on actual counts, on the available supply of narcotics and other elements, lead the authors to conclude that the number of addicts in the country at that time was about 110,000.

In a recent letter to the writer, Dr. Kolb expressed some rather confident convictions on the issue under consideration. He said in part: "The number of addicts in the United States is certainly decreasing. The decrease has been very rapid during the past ten years. The total number of addicts at the present time is surely not more than one-half of what it used to be. Prohibition has had no effect

[4] *Ibid.*, p. 21.

[5] Published by the U. S. Public Health Service as Reprint No. 924 from the *Public Health Reports,* May 23, 1924, (Washington, Government Printing Office).

whatever on drug addiction. The taking of opiates by drunkards because of their drunkenness was in the past a fruitful source of drug addiction, but it is now of relatively little importance. The reason for the change is that opiates formerly procured with ease are now obtainable only with great difficulty and danger; also, the social and legal penalties for taking narcotics have increased many-fold during the past ten years so that *addicts now often go from opiates to drink.*"

Colonel L. G. Nutt, Deputy Commissioner of Prohibition, in charge of the administration and enforcement of the narcotic laws, has repeatedly and vigorously asserted that in recent years drug addiction has decreased. Among the evidence he presents are the results of surveys by his field agents; and on the subject of prohibition he states that he has seen no transference from drinking to addiction. The most hopeful testimony showing a decrease in addiction is his statement that the average age of addicts has advanced. Before the House Appropriations Committee, in 1927, he pointed out that addiction is not securing as many converts as before, and stated concerning the addicts: "Five or six years ago we would find them ranging from 18, 20, 22 and 25 years old. Now they are above 30 years." [6]

Another of the organizations which has made a survey of the relation of prohibition to drug addiction is the Foreign Policy Association. Through its

[6] Contained in material sent by Colonel Nutt to the writer, some of which is not for general circulation.

KANAWHA COLLEGE LIBRARY

Committee on Traffic in Opium, the Association communicated with a good many heads of government bureaus in touch with narcotic drug addiction, also with police directors, prison officials, and others in representative cities.

The Association reported in a release to the press on July 13, 1925, that: "Without exception the replies received have stated that prohibition has had no effect whatever on drug addiction in the United States." The writer went through the records of all the reports received, and has seen the original documents. Those who make this assertion include Hugh S. Cumming, Surgeon-General of the U. S. Public Health Service, and police and prison officials in New York, Boston, Chicago, Detroit, San Francisco, and elsewhere.

SURVEY BY THE COMMITTEE ON DRUG ADDICTIONS

The most intensive study by non-governmental authorities of the trend of drug addiction, in so far as opium is concerned, is that which has been conducted for six years by the Bureau of Social Hygiene, a national research agency with headquarters in New York, through its Committee on Drug Addictions. The writer spent an afternoon with Dr. Charles E. Terry, in the hope that he had facts determining whether there had been any increase or not. The following letter from Dr. Terry is given as expressing only his own opinion, but as an outstanding specialist in this field, he is in a position to give a

clear-cut summary of the situation that should bear considerable weight:

> The Committee on Drug Addictions has been occupied for the past six years with a study of the scientific, sociologic, and certain other aspects of the opium problem. The literature has been rather carefully reviewed and practically every promising source of information has been consulted. As far as I know, however, there are no data available upon which to base a determination as to the increase or decrease of opium addiction or of cocaine use since the passage of the Volstead Act, or for that matter, for almost any other given period during the past fifteen years.
>
> To determine the trend of opium addiction or that of the habitual use of cocaine, it would be necessary to determine either the amounts of these drugs smuggled annually into this country, or to obtain a census of all users of these drugs. As far as I know, no one is in possession of these facts. Their very nature is such as to preclude their possession.

Some of those who assert that there has been an increase in drug addiction since prohibition find comfort in the increasing number of cases tried and convictions secured. But if the law did not really begin to be operative until about 1920, how does this prove anything? As Colonel Nutt, in charge of the enforcement of the narcotic laws, justly explains: "The fact that increases in the number of violations and the number of convictions have resulted does not necessarily indicate an increase in the illicit use of traffic in narcotics. The increases noted are due

rather to the strengthening of Federal enforcement facilities. This has been accomplished in two ways —one by an increase in the number of Federal narcotic officers, and the other through administering the narcotic laws by a separate enforcement division not required to perform any other work. At the present time there are 300 narcotic field officers."

REPEATED DENIALS DISREGARDED

Numerous denials that drug addiction has been affected by the liquor problem have been issued in comprehensive reports by well-informed authorities, but seem to have had but little influence on those who have wished to think otherwise. Miss Cora Frances Stoddard, Executive Secretary of the Scientific Temperance Federation, has made extensive and convincing surveys of the question for that Federation several times since prohibition. She secured opinions and data from twenty-six states in all regional divisions of the country. She has shown that there are absolutely no statistics and no experience to afford any ground for the claim that prohibition has increased drug addiction, and she has also called attention to the spread of drug addiction in non-prohibition countries, as a suggestion to some of the persons concerned about it that they consider other possible causes. Her conclusions form a fitting summary for our own chapter, and we are in substantial accord with them. She has stated: [7]

[7] The quotation is contained in an excellent article by Miss Stoddard, on "Prohibition and Drug Addiction," in the *Scientific Temperance Journal*, Spring, 1926, pp. 7-14.

I. There are absolutely no statistics and almost no experience cited to afford any ground for the claim that prohibition has increased drug addiction.

II. There were no trustworthy statistics before prohibition as to the extent of drug addiction. Hence there was nothing with which conditions today can be legitimately compared.

III. It is the general opinion of officials in position to make inquiries and to observe that drug addicts were not and are not made from pre-prohibition alcoholics. The youth of the average drug addict, the universal evidence as to the large influence of associates and of the illicit peddler place the responsibility for drug addiction on social or physical causes other than alcoholic addiction.

IV. Enactment and enforcement of Narcotic Drug Laws may temporarily increase the number of arrests or the number of applicants for drugs as the supply grows scarce, without representing any genuine increase in the number of drug users. Enforcement of these laws tends to reveal addiction. This apparently was what happened in 1919 when better laws enabled federal officials better to enforce the Harrison Narcotic Act just at the time that the federal prohibition laws first came into operation. The two conditions and their results were coincident, not cause and effect.

V. The spread of drug addiction in non-prohibition countries indicates that causes other than prohibition are responsible for it.

CHAPTER VIII

IS THE AVERAGE WORKER SPENDING LESS ON DRINK?

CHARLES BOOTH, in his monumental investigations of the population of East London, published in 1900 and successive years, concludes that the poverty of about 14 per cent of the poor, aside from that of the paupers, was attributable to their excessive indulgence in liquor; [1] and in this country the Committee of Fifty, publishing about the same time, concluded that of persons actually helped by charitable societies, about 25 per cent were in such a plight because of the use of liquor, either on the part of the applicants themselves or of other persons.[2] These two outstanding reports are but the more notable ones among a large number of detailed studies of poverty, dependency, and pauperism in which liquor is shown to be a conspicuous contributory element.

Has prohibition diminished the importance of the downward pull of drink on the wage-earner? Has it reduced the expense of drink, and kept him out of dependency brought on by drink?

The assertion has been made by the U. S. Brewers' Association and generally by those against prohibi-

[1] Francis G. Peabody, *The Liquor Problem*, p. 96.
[2] *Ibid.*, p. 109.

tion that the country is drinking more alcoholic beverages of all kinds today than before,[3] and that more is spent on liquor. Among the assumptions behind this are that the great mass of the workers entered the saloons only because they could not do without liquor; that ever since saloons were abolished, people have continued to want liquor so much that they have either bought in like amount from the bootlegger, or started kitchen distilleries or breweries; that the danger of being poisoned by liquor has deterred no one; that the high prices exacted by bootleggers have been no obstacle; and that the treating habit, which everyone knows to have been responsible for a considerable proportion of the drinks bought, has been only a minor factor.

With these assumptions the writer cannot agree, since they are contrary to the strong impression obtained from a variety of sources of intimate information. Those who are really close to the lives of

[3] The latest estimate of this kind is an article on "The Present Consumption of Alcohol in the United States," by Hugh F. Fox, Secretary of the U. S. Brewers' Association and Editor of *The Periscope,* published by that Association. Mr. Fox's article appeared in the April, 1927, issue of this periodical. We do not agree with the estimates, since Mr. Fox uses as a basis such statements as that made by Mr. Buckner (discussed in Chapter III), but we do not believe it necessary to criticize the statement in detail. Mr. Fox would probably agree that in the final analysis all our information about present alcohol consumption is pure guess. As was found years ago by the Committee of Fifty, concerning the effects of state and local prohibition: "Whether it has or has not reduced the consumption of intoxicants and diminished drunkenness is a matter of opinion, and opinions differ widely. No demonstration on either of these points has been reached, or is now attainable, after more than forty years of observation and experience." (Francis G. Peabody, *op. cit.,* p. 53.)

groups of people and have had a chance to observe conditions, talk about bootlegging, speak-easies, effects upon the young, and poison liquor, but few assert that, as a whole, the masses of the people are not only drinking more but also spending more on alcoholic beverages than in the days of the four-saloon corners. As we see it, the wage-earners are paying out a great deal less on drink and all that went with it than they did before prohibition, or than they would spend today if we did not have it.

Of course, we are dealing here with something that cannot be answered in positive terms. If we are unable to offer statistical evidence as proof of the statements made, it is because the situation does not permit of such proof. This applies both ways. We have examined the assertions that the quantity of alcoholic beverages consumed today is greater than before, and they seem far-fetched. No one knows just how much liquor is consumed. We must content ourselves with surface evidence because no other kind exists. If what we shall now discuss is largely our own judgment as to things rather than anything approaching concrete fact, it is at least based on, and supported by, the observations of many people who have given the matter earnest thought.

THE COUNTRY'S DRINK BILL

Those opposed to prohibition almost invariably understate the amount spent on drink in pre-prohibition days. They are inclined to use the factory

cost of a gallon of liquor rather than what the consumer paid for it in small glasses over the bar, or they cite U. S. Census figures for 1919, when wartime prohibition was in force for half the year and other conditions described in Chapter II existed, which reduced consumption radically.

A characteristic example of this kind is a letter from E. Clemens Horst, California hop-grower and a vigorous opponent of prohibition, who on November 16, 1926, wrote to the author:

> The Anti-Saloon League Year Book of 1925 publishes, on page 13, the statistics of the Liquor Manufacturing Industry of the U. S. for the year 1919 as compared with 1914. It gives the total value of distilled liquor, malt beverages (beer) and vinous beverages (wine) for the whole U. S. A. as follows:
>
> Year 1914 (ending June 30) $665,545,683
> Year 1919 (ending June 30) 429,213,364
>
> The year 1919, ending June 30, was the last full year before National Prohibition went into effect.
>
> It follows, therefore, that if not a drop of whiskey, wine, or beer were now consumed in the U. S., and no other beverage or food or amusement taken in place of liquor, wine, or beer, then the whole saving to the U. S. A. could not be more than the above $429,213,364.00, or say double that amount if that amount is the wholesale, instead of the retail price of the liquor, wine, or beer.

Mr. Horst is in error. First, the U. S. Census figures for 1919 cover the calendar year, which was not a "full year before National Prohibition." We

must take into account the effects of war-time prohibition, which came into operation July 1, 1919, so that 1919 figures are no standard. Besides they and the 1914 figures are the data for value of products at the factory. Everyone knows that factory costs are no index to what the ultimate user pays. Even standardized and non-perishable package goods often bear added burdens of distribution through wholesaler and retailer far exceeding the factory cost. This is particularly true of the distribution of liquor, beer, and wine, on which series of high internal revenue and local license taxes were levied, which required refrigeration when served to the consumer, which involved charges for "protection," graft, and politics, and which brought profits to saloon-keepers that were usually the envy of neighboring candy stores and grocers.

Starting first from the point of view of quantity produced, and recalling the figures given in Table I, we see a huge total of 2,252,272,265 gallons of liquor, wine, and beer sold at retail in 1914. To arrive at retail cost one must figure into how many drinks a gallon of whiskey could be made when sold in small glasses over the bar, how many orders were served per gallon of beer or wine, and what each order brought. This in turn requires an estimate of the proportion of alcoholic beverages distributed in larger containers, such as quarts or gallons.

We, ourselves, are not equal to the task, but fortunately some light is thrown on this by others who have attempted it.

In pre-prohibition years, the *American Grocer*, a trade periodical, used to make an annual estimate of the country's bill for alcoholic beverages. In the issue of June 9, 1915, it showed that in the fiscal year ending June 30, 1914, the nation spent for beer, imported and domestic, $1,005,899,201; for spirituous liquors (whiskey, brandy, etc.), $609,508,620; and for wines, $128,169,922, making a total drink bill for the year of $1,743,577,743.

In a later issue,[4] the *American Grocer* analyzes the cost during a three-year period of each of the three types of alcoholic beverages. First it gives the following table for consumption of domestic and imported distilled spirits (whiskies, brandies, etc.), based on government data:

Year Ending June 30	Domestic (gallons)	Imported (gallons)	Total (gallons)
1916	136,252,546	3,706,186	139,958,732
1915	124,206,650	2,952,448	127,159,098
1914	139,226,557	4,220,670	143,447,227

It then states:

Based on 60 drinks to the gallon at an average retail cost of $4.50, consumers paid a yearly average for three years of $599,528,628 for domestic whiskey. . . . Add an average yearly expenditure for imported spirits of $18,730,494. The average yearly cost of imported and domestic spirits for three years, 1914-1916, was $618,259,122.

[4] July 4, 1927.

For these three years, 1914-1916, the total consumption of beer is given as 2,056,407,108 gallons, 1,855,524,284 gallons, and 1,818,266,448 gallons, respectively. The average amount paid in retail expenditure for beer during the three years is estimated as $913,003,696. The cost of domestic wines and imported wines is then figured in similar fashion and an average annual figure arrived at of $103,785,216 for the three-year period.

Its conclusion is: "The cost of spirituous liquors averaged annually for three years (1914-1916) $1,635,034,000. With a review of the cost of drink there comes a revelation of the expense of self-indulgence, waste, more or less of woe, and a lamentable lack of wisdom."

With these figures from a responsible trade periodical as a basis, and keeping in mind our present-day price level and the increase in population, we find that the estimate usually made by the "Drys" as to the probable cost is not as far wrong as those of the "Wets." Mr. Wayne B. Wheeler, in *Current History,* August, 1925, states:

> Had our liquor consumption kept pace with the population increase since 1917, the latest year for which the drink bill was estimated, and considering the normal increase in cost, we would this year be expending over $2,500,000,000, since our population has grown from 102,172,845 in 1917 to 113,500,000 in 1925.

Nevertheless, so that we may not err in the wrong direction, it seems plausible to use $2,000,000,000

as a possible estimate of what our drink bill today would be if the sale of liquor were as unhampered as in 1914. Considering population increase since 1914, also the fact brought out in our second chapter, that the amount consumed had been increasing faster than the population; taking into account the increase in prices today of 60 per cent or more; and remembering also the numerous studies of a statistical nature demonstrating that a great deal more liquor is consumed in such times of prosperity as we have been having, the guess of $2,000,000,000 appears to be conservative enough even to correct any excesses that may have existed in the original figures. But we wish to make it clear that we are mentioning this figure only for discussion purposes here, and do not urge its acceptance elsewhere. We should prefer not to be quoted for it.

Now what is happening to that $2,000,000,000? Is all that money that might go for drink being diverted into other channels? Of course not. For the relief of the contentious person we shall repeat, at the start, that no small part of it is still assigned to drink.

We may make it plain, too, that prohibition has done no good whatever to the heavy consumer of hard liquor who insists on drinking as much today as he did years ago. As reported to us on all sides, his plight is pitiable and he is doing himself more injury than he might if liquor were not prohibited. Having disposed of this aspect temporarily, let us proceed to two other possibilities: the money may

be saved, or it may be spent for something other than drink. It is admitted that a minority is not doing either.

It appears to us most likely that the great mass of the people, however, are spending much less on drink today than in pre-prohibition days. Our reasoning to this conclusion is based on several observed facts, and is submitted for what it may be worth.

1. Though the volume of alcoholic beverages made by moonshiners, fly-by-nights, and others, as well as that brought in by rum-runners, is undoubtedly huge, it would take a great deal more freedom than even our lax administration permits, to make available over two and a quarter billion gallons of alcoholic beverages, a year, as were distributed in 1914. With prohibition the law of the land, one has to take an aggressive interest in liquor in order to obtain it, while in former times there was social pressure on every side that one stop in at the nearby saloon for "just one round." It should be noted that beer constituted over 90 per cent of the total consumption—nearer 92 per cent in many years—and that thus no statistical legerdemain concerning the quantities of liquor supplied by bootleggers brings the total made available in that way within striking distance of the former consumption.

The observations of many people can be epitomized by a letter of one industrial executive, who puts it aptly as follows:

Maybe some people drink more under prohibition than before there was prohibition—*maybe* some persons

drink now who never drank before prohibition, but there is no *maybe* about the fact of there being more *non-drinking men today* than ever before, and in non-drinking persons you find the great economic values.

Questionnaires sent out for the writer by three large companies writing industrial insurance, as explained in Chapter I, were answered in two cases by the managers of local branches, who secured the information either through personal conversations with the agents, or, in some instances, by discussions at the agents' meetings and a viva voce vote. In the third case, a letter was addressed to 520 agents directly, all of whom had been in the service of the company since at least 1914. One question included was: "Taking the situation as a whole, would you say that industrial policyholders now drink less liquor on the average than before, or more?"

Of course, no unusual authority attaches to the answers, which are no more than the opinions of average persons. However, insurance agents have exceptional opportunities for observing conditions among wage-earners, and their reactions are of more than ordinary interest. Almost four-fifths of the branch managers reported that in their districts the industrial policyholders were drinking less, while 276 of the 520 agents who replied individually, stated that policyholders in whose homes they collected premiums drank less liquor on the average than before.

In the case of the branch managers, an additional

question had been asked, namely: "Are the industrial policyholders who have given up drinking since prohibition more numerous or less numerous than those who have taken it up since 1920?" To this question, about two-thirds of the districts reported that industrial policyholders who had given up drinking since prohibition were more numerous than those who had taken it up since 1920. Their answers were based on the opinions of their agents.

2. Let us now consider the cost of liquor when bought from bootleggers. Surely, the economic law of supply and demand has ceased to function if as much is drunk today as formerly. We are much impressed by the frequent statement made in conference and occasionally in writing that a good deal of the money spent on liquor today comes from the classes best able to pay the prices which night clubs and bootleggers demand. This is by no means universally true, and the wage-earner who insists upon drinking as much today as he did formerly is undoubtedly worse off, as we have stated. But the chief markets for the rum-runners are the fashionable and commercial classes. This has economic importance. A writer on the subject stated a few years ago:

> Those who break the law—what do they amount to in the view of Consumptionism? For mostly those who can afford bootleggers and roadhouses are already provided to the point of saturation with furs and motor cars and entertainments; it is the millions with the hankering for these things still hot within them who matter just now

to Consumptionism. From this point of view, prohibition has proved a success, not a failure at all.[5]

This same idea has been expressed as the observation of many people, and seems to us to have a considerable foundation in truth.

ECONOMICS OF DRINKING AT HOME

3. It will be stated that many people do not buy from bootleggers, but make liquor for themselves. This is true. In a later chapter we have occasion to present facts of grape production that would strongly indicate a widespread making of wine at home. The brewing of beer, however, is not as easy nor as practical as most people believe, since the process of producing good beer is complicated. The extent of home brewing, therefore, is stated by authorities, including some brewers themselves, to be greatly exaggerated and not nearly as extensive as asserted in some quarters. Home distilling undoubtedly is carried on by many people.

But even if the making of an alcoholic beverage is to be found existing in many homes, what does that prove as to the economic effect upon the wage-earners involved? Most people seem to overlook certain significant economic aspects of the change that has taken place in the production and consumption of liquor under present conditions.

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[5] Samuel Strauss, "Things in the Saddle," *Atlantic Monthly*, November, 1924, p. 582.

The circumstances under which alcoholic beverages are consumed today are vastly different from an economic standpoint than those of the days of the open saloon. Were we, in this series of articles, dealing with the moral effects, we might stop to share in some of the concern which is felt in some quarters as to the prevalence of drinking in the home. But looking at this phenomenon from a coldly economic standpoint, one cannot avoid the conclusion that *this is the cheapest way!*

The people who crush their own grapes and make their own wine or beer are putting their own labor and overhead into it. For five cents a pint they can produce wine which would have cost them a great deal more in a retail store. And once made, the conditions under which it is consumed are vastly different. These conditions, now to be considered, have made drinking much less serious for the wage-earner.

PAY CHECKS AND THE SALOONS

4. One of the attractions of the saloon to the wage-earner without financial standing was the encouragement it gave to cash the pay check within its congenial atmosphere.

An older report of the United States Commissioner of Labor, includes a statement by a firm employing 240 workers in the handling of coal, located both in Milwaukee and Chicago, which by tracing the signatures on the backs of checks kept a record for two months of the places where its pay checks

were cashed.[6] The important part which the saloon played in this will be seen more clearly when it is noted that these checks were distributed, not on Saturdays, when it might have been difficult to get to the bank, but on Tuesdays; also that these were not all laborers but that 3 per cent of the Germans, 47 per cent of the English and Americans and 20 per cent of the Scotch and Irish were superintendents, clerks, etc. Thus, the percentages in the table presented below apply to all employees receiving pay or salary checks.

Nationalities	Per Cent of Employees in Chicago Branch Cashing Pay Checks at Saloons	Per Cent of Employees in Milwaukee Branch Cashing Pay Checks at Saloons
Hungarians and Poles..	77	100
Germans	70	64
English and Americans..	61	35
Scotch and Irish	74	35
Swedes and Norwegians.	9	..
TOTAL	64	57

It may be stated as a fact, testified to by numerous employers, that the cashing of pay checks in saloons has been, to all practical purposes, eliminated, and the speak-easies have not taken over this function. Employers and savings banks have in many instances made arrangements for the cashing of checks, while, on the other hand, retail stores have been

[6] U. S. Commissioner of Labor, *Twelfth Annual Report*, 1897 (Washington, 1898), p. 78.

obliged to provide this service. A typical reply from employers is the following: "During the pre-Volstead days, a large number of our employees would get all their pay checks cashed at saloons. Today, the endorsers of these checks are the groceries, the meat markets, and the dry-goods stores."

DECLINE OF THE TREATING HABIT

5. Less money is squandered in the sociable atmosphere of the saloon. The evil of cashing a pay check at a saloon was the extravagance which the availability of ready cash in that environment encouraged. Indeed, from an economic standpoint, treating was perhaps the worst of the practices which the saloons promoted. So great was the social pressure to "buy back," that no one in a group could resist it, and the genial bartender interposed with his round of drinks when there was a tendency to forget it. By the time that a man had had several drinks, his judgment and inhibition were likely to have become weaker. In cases too numerous to mention, when the wage-earner came out in the clear air, a large part of the pay had been spent that was needed for absolute necessities by himself and his family during the week.

Now, according to vivid and almost universal testimony, the pay envelope is first brought home, whether it stays there or not. The worker's wife and family are at least given a chance at it. One of the

evidences to this effect is a questionnaire sent out by the Federal Council of Churches, in 1925, to members of the National Conference of Social Work, which asked among other points whether wives and families since prohibition got a larger or a smaller proportion of the husband's income. Of the 233 reporting on this question, 203 stated that the proportion was larger.[7]

Many of the concerns which wrote us, and many insurance agents, pointed out advantages to the immoderate drinker. As one says: "I have observed that the man who wants his beer or liquor gets it and brings it home or makes it at home, and there consumes it. But he wakes up Sunday A.M. with his wages where they belong, at home, instead of left at the old corner saloon."

There are allegations that some people now drink liquor who did not drink it before. But the opposite is also true. There is a good deal of testimony in our correspondence that with the saloon abolished, many users of liquor have been able to give it up. The only way we have been able to arrive at a general conclusion is to consider the effects on the vast majority of the former patronizers of the saloons.

GARNISHMENTS BY WIVES AND COLLECTORS

The differences are seen by executives close to the problem of paying out wages, who have answered

[7] Federal Council of Churches of Christ in America, *The Prohibition Situation* (New York, 1925), p. 14.

our questionnaire to industrial concerns or have been interviewed personally. They report a marked reduction in the number of wives coming to get the wages of their husbands before others got it, and a marked decrease in applications for loans, garnishments, and the like, by drunkards. Typical claims reported are the following:

A printing press plant of Chicago: "Before prohibition it was not an uncommon sight to see a wife drawing a husband's pay on account of his drinking habits—today we have no such incidents on pay day." A Philadelphia hat manufacturing plant: "It was an almost daily experience where men would come to the office and demand their money so as to continue their debauch. We always refused to give a man his money when he came around drunk, feeling that we had a right to withhold same when he was not in proper condition to receive the money, but such experiences are absolutely unheard of today." A Cleveland metal plant: "The head of our Pay Roll Department informs me that since prohibition there have been fewer cases of where we have been bothered with collectors or claim agents attempting to secure liens on the pay of our employees. He also states that before prohibition a considerable number of the wives of our employees were accustomed to come with them to the pay window and take charge of the pay envelope immediately, but that now this custom has practically ceased."

A large insurance company of Hartford, Conn.:

"In pre-prohibition days the borrowing of money in the office was more common, due to the fact that the treating habit very often resulted in an employee spending a large part of his wages on pay day." A traction company in Ohio: "The best evidence is in the number of garnishments. Before prohibition we had large numbers. Now very few. Our employees now pay their debts and money does not go for liquor."

CHARITY CASES CAUSED BY DRINK

One of the results observable in social data is the smaller proportion, practically everywhere, of those reduced to dependency by drink, as shown by the reduction in cases in which intemperance has been a major or an important factor in relief work. The charitable organizations of the country have not kept as good records on this matter as one should like, nor have more than a small minority the data going back far enough before prohibition to allow a comparison to be made. But in practically all the cases which the writer knows about or investigated, of organizations which did have facts, the proportion of cases in which intemperance was a cause during 1921-1926 was much lower than during 1916-1920, although the latter was a period of unusual prosperity. It makes a good one for comparison.

A compilation of available statistics is given in Table XVI. Though incomplete in its data and subject to various limitations if it were offered as a

conclusive report, the information presented does have cumulative significance as to the lesser importance of liquor in dependency. We originally included only the detailed figures for the years 1916, 1920 and 1925. The year 1926 was inserted just before going to press, having become available very recently. These selected years are adequate for the purpose intended, that of showing the important fact that the proportion of cases attributed to drink has in most cities been increasing if compared to 1920—a low point in all data.

Nevertheless, it is clear that the situation is still far better than in 1916. Due to the inadequate enforcement of the law, the proportion in prohibition years has not been reduced to as low a figure as would be desired, but even at its worst during prohibition the factor of intemperance is less important than before. As one case worker puts it: "I can say without hesitance that families which our associated charities' office bought clothes and shoes for, every winter, graduated from the dependent class into the self-supporting class when the father could no longer spend his wages in the corner saloon."

A good deal of similar testimony which cannot be compiled in a table was also secured. A trip to Providence showed a marked decrease in cases due to intemperance handled by the Rhode Island Society for the Prevention of Cruelty to Children, and the Municipal Lodging House of Providence yielded statistics showing a drop in the number of men assisted by material relief because of intemperance

Table XVI. Proportion of Dependent Cases Due to Intemperance Handled by Charitable Organizations, 1916-1926

State and City	Average Per Cent of All Cases in Which Intemperance Was a Factor					
	1916-1920	1921-1925	1916	1920	1925	1926
Massachusetts:						
Boston Family Welfare Society	15.1**	6.6	27.4	2.3	8.6	7.0
Boston Provident Association	12.8	6.7	14.9	4.8	8.6	9.3
Haverhill Family Welfare Society	17.7	7.8	34.8	13.0	16.8	13.7
Newburyport Community Welfare Service	12.3	3.5***	20.3	7.0	***	7.9
New York:						
N. Y. C. Charity Organization	16.1*	9.8	19.9	9.2	12.0	13.7
Rochester Social Welfare League	16.4	4.5	20.8	4.3	10.0	11.0
Pennsylvania:						
Pittsburgh Associated Charities	15.2**	6.9	**	7.6	9.9	13.9
Philadelphia Soc. for Orgn'ng Charity	13.6	9.7	18.0	3.0	7.5	5.4
New Jersey:						
Atlantic City Welfare Bureau	5.4	2.2	8.2	1.8	2.26	2.0
Children's Aid Society & S.P.C.A., Essex County	10.8	7.9	17.2	4.6	8.5	10.4
Newark Social Service Bureau	6.5	8.8	10.9	4.3	14.9	....
Plainfield Charity Org. Soc	11.3	7.2	13.9	4.7	11.2	11.9
Illinois:						
Chicago United Charities	6.0	2.8	8.0	0.6	2.6	9.3
Ohio:						
Cleveland Associated Charities	12.6	7.4	14.4	5.9	9.4	9.7
Cleveland Humane Society	15.5**	7.0	**	6.6	6.9	6.2
Rhode Island:						
Newport Family Welfare Society	10.8	3.9	18.7	7.5	2.0	3.6
Pawtucket Associated Charities	2.1	0.2	4.6	0.5	0.1	0.15
Providence Soc. for Orgn'ng Charity	4.0	0.5	4.9	0.3	0.6	3.4
Connecticut:						
Hartford Charity Org. Soc	15.3	4.9	23.8	3.1	7.7	6.3
Stamford Richmond House	7.8	7.5	4.2	7.6	11.2	11.5
Wisconsin:						
Milwaukee Fam. Welfare Ass'n	7.8	7.6	4.4	1.6	13.6	13.9
Maine:						
Portland Associated Charities	10.6	1.3	29.7	0.6	2.2	3.6
Kentucky:						
Lexington Family Welfare Society	5.5**	1.2	**	1.4	0.9	....

* Figures for 1918 and 1919 unavailable.
** Figures for 1916 unavailable.
*** Figures for 1925 unavailable.

Note: This table is based chiefly on an unpublished report on "Prohibition and Public Welfare" by Cora Frances Stoddard. Statistics for 1924 and 1925 were gathered in 1926 and 1927 by the Scientific Temperance Federation to supplement the table, ending with 1923, compiled by the Research Department of the Federal Council of Churches of Christ in America in its pamphlet on "The Prohibition Situation," pp. 18-19.

It is to be noted that the statistics are presented for the purpose of showing the trend of a group of cities as a whole, and are not intended as an aid to comparisons between one community and another, or between conditions in any one locality from year to year. The method of securing and recording the data may explain differences shown among the various cities, while the year-to-year changes in any one community may be due merely to the addition of a new agency specializing in a certain kind of relief work, a procedure which upsets the previous balance and gives a wrong impression as to the increase or decrease of intemperance among relief cases.

from about 8 per cent in 1916 to less than 3 per cent in 1925. A questionnaire sent out by *The American City,* in coöperation with this survey, to mayors in cities of under 50,000, showed that intemperance as a factor in relief had become less important quite generally. A study made by a graduate student in Madison, Wis., of 1000 case records at the Public Welfare Association of that city, shows a drop in dependent families caused by drink from over 22 per cent in 1916 to less than 4 per cent in 1924. The Massachusetts Society for the Prevention of Cruelty to Children found intemperance a factor in almost 48 per cent of the cases handled in 1916, but the average during the five years ending 1925 was only 20 per cent. Many societies, which had exceptionally few cases connected with intemperance and claimed an improvement since prohibition, are omitted because their records went back only to 1919 or thereabouts.

Similar statements come from everywhere. The Annual Report for 1925 of the Chief Factory Inspector of Rhode Island calls attention to the marked decline of children in the State's industries. Analyzing the causes, he concludes:

> After careful consideration of the matter, aided by such information as I have been able to gather, I am led to believe that the decrease has been largely caused by the absence of the legalized open saloon, which has resulted in a larger number of full pay envelopes reaching the homes of the workers and minimizing the necessity of the children's wages for the support of the household.

The opportunity for child labor remains the same, but the necessity for it is not as great.

Miss Ethel M. Johnson, Assistant Commissioner of the Massachusetts Department of Labor, who administers the minimum wage boards, relates an experience that seems the more interesting because it occurred in the depression year 1921:

After the revised decree for office and other building cleaners became effective, February 1, 1921, fixing a higher minimum rate for scrub women than that under the old decree, one of our agents noticed that in one of the large office buildings in the city where she was working that the women cleaners had been replaced by colored men. As we try to ascertain whether the decrees have any effect in causing the dismissal of women, she inquired of the building superintendent the reason for the change, asking if it was due to the higher minimum rate. He stated that it was not; that they preferred women to men for this work if they could get them. He added, however, that many of the scrub women are married women and that since prohibition the husbands who had formerly spent their earnings at the corner saloon were now providing better for their families so that fewer women were available for this work.

PROHIBITION AND THRIFT

It has frequently been stated that as a result of prohibition, workers are able to save more of their income, and are thus benefiting from the abolition of temptation associated with saloons. This type of

claim is not new in the history of prohibition legislation, as the diversion of money from the grog shop to other purposes has been frequently stated to be an observed result of state and local action against saloons. As an instance, the president of a large savings bank in Des Moines, Ia., relates as the experience in that state the following:

> Several years ago, when our State accepted prohibition ahead of the rest of the country, I took the trouble to investigate the results after we had been on that plan for a couple of years, through the large department stores and other big concerns in our city; and without a single exception they all gave a very striking account of the manner in which trade had increased with them, that the husbands and fathers that they had never seen before were coming in with the family and that they were buying better goods.

Those who have asserted that former drinkers are saving more have often been countered by the denial that there has been any striking increase in savings. Hence, the first thing to determine is whether there has actually been any notable increase in thrift, particularly among the economic classes which would be more likely to save their money if they did not spend it on drink.

Postal savings are one source of information as to the thriftiness of the poor, since the depositors in these are the humblest in the economic scale. The most impressive fact in the U. S. Postmaster's figures is the increase in the average principal per depositor

from $111.82 in 1914, to $336.03 in 1926.[8] As the postal savings banks pay only 2 per cent interest, we should expect the increases in per capita savings to bring many more depositors to the private savings bank.

In the American Bankers Association's annual compilation of facts concerning private savings banks, the most striking fact, indeed, is the increase in the number of depositors. As compared with an average of 12,378,909 savings bank depositors in the five-year period 1912-1916, the average for 1922-1926 was 39,155,499, culminating in 1926 with 46,762,240 depositors, the highest number ever recorded.[9] The number of schools participating rose from 2,736 in 1919-1920, to 10,163 in 1924-1925, but while almost one-fourth of the gain in number of savings accounts may be attributed to the growth of school savings the per capita savings deposit for 1921-1925, for the population of the country as a whole, was $188, as compared with $90 for 1912-1916.

A letter was addressed to twenty-five savings banks in various parts of the country. The majority of the banks are certain that prohibition has aided in increasing their business, but some are in doubt and inclined to credit the increase to other factors. Several point to the war as an influence in encourag-

[8] *Annual Report of the Board of Trustees of the Postal Savings System,* 1926, 69th Congress, 2d Session, House Document No. 560, p. 6.

[9] American Bankers Association pamphlet, *Savings Banks and Depositors, 1912-1925,* and later press releases.

ing thrift, through the campaign for the purchase of Liberty Bonds and War Savings Stamps. Typical replies illustrate the various points of view.

Carl M. Spencer, President of the Home Savings Bank of Boston:

I certainly attribute some of the nation-wide gain in savings to the effects of prohibition. Improved conditions, as a result of this, are very noticeable in the poorer sections of the city.

Thomas F. Wallace, Treasurer of the Farmers and Mechanics Savings Bank of Minneapolis, Minn., writes:

There is no question in my mind that prohibition has led to an increase in savings. But the remarkable increase in savings during the past few years is due to several causes. Prohibition is, in my opinion, one of these causes and an important one. Steady employment and largely increased wages are other very important factors, as is the Government's propaganda for thrift.

Orrin C. Lester, Assistant Vice-President of the Bowery Savings Bank in New York City, believes:

It would be impossible for anyone to say definitely that the Eighteenth Amendment has had the effect of increasing savings among the American people and savings deposits in banks. I suppose it is true that when any universal appeal, such as intoxicating liquor, is removed, it is bound to react favorably. While I have no doubt but that prohibition has had its influence, I do not feel that anyone should positively make that asser-

tion, because there is no way to secure the facts that would successfully substantiate that position.

On the other hand, William L. De Bost, President of the Union Dime Savings Bank in New York, states:

> My personal opinion is that so-called prohibition has had very little to do for the last few years with the savings bank situation, and one reason why the amount of deposits has increased is because of the legal limit having been raised, first from $3,000 to $5,000, and recently from $5,000 to $7,500.

We have, however, taken this into account, having shown that the significant increase is in the number of depositors, rather than in the added amount saved.

E. K. Satterlee, President of the Franklin Savings Bank of New York, writes:

> There seems to be no doubt that prohibition—particularly the elimination of the old corner saloon—has greatly stimulated saving; but I am inclined to look in other directions for the real reason back of the substantial increase in savings.

At the round table discussion on prohibition, at the American Economic Association meeting in December, 1926, Professor Tippets, of the University of Iowa, made the following comment:

> We have been told a good deal about the vast increase in savings deposits. A lot of that may be the result

from the increase coming from the transfer of real income from the farmer to the industrial worker, and here also is a factor; there has been a steady movement in this country of a desire to transfer deposits to savings. Why? Because if they are members of the Federal Reserve System they only need to carry three per cent reserve against their demand deposits. I do not know how extensive that movement has been, but I have a feeling you could show a large part of your increase in savings deposits have come from a desire on the part of bankers to transfer as large a part of the deposits as possible to the savings side and get a lower reserve, three per cent.[10]

We have not looked into the point Professor Tippets has made because we have not relied upon the increase in deposits alone to show the wide diffusion of thrift, but have presented the figures showing the increase in the number of depositors. The criticism would not affect the validity of our contention that a great many people are enabled to save, or to save more, because they no longer live under the influence of the saloon, an institution admittedly encouraging profligacy.

The replies received from industrial concerns, as shown in the questionnaires returned, make a great deal of the favorable influence of prohibition on thrift. Over 200 concerns pointed out the favorable influence of the abolition of the saloons in this respect, and their statements were often expressed with such conviction and with such striking examples of

[10] *The American Economic Review,* Supplement, March, 1926, p. 9.

changes in the lives of the wage-earners under their observation that, on our part, we accept their evidence as fact.

Insurance companies have invested extraordinary amounts in mortgages and real estate bonds, because insurance has had a remarkable growth during the past few years in all branches. We shall, however, omit from discussion "ordinary" life insurance and group insurance, and confine ourselves to the type bought by the wage-earner—industrial insurance—collected in weekly premiums by the wage-earner. The contrast in such insurance since 1914 may be seen in the fact that, while the average for the six years 1914-1919 was less than 5¼ billion dollars, that for 1920-1925 was almost 11¾ billions, showing an increase in 1925 over 1914 of 208 per cent.[11]

The reasons for the increase in industrial insurance are, of course, numerous. Nevertheless, one may well take into consideration the abolition of the saloon and the possibility that prohibition of alcoholic drinks had some influence.

A questionnaire was sent out to 520 insurance agents by one of the largest insurance companies in the country. Over 400 of the agents stated that it was much easier to write industrial insurance and collect premiums, and 226 explained that the abolition of the saloon was the chief cause or one of the causes, mentioning various other reasons also, of course. Their answers included vivid illustrations

[11] Secured from the Association of Life Insurance Presidents, New York City.

of conditions of collection before prohibition, when, in some instances, the agent had to call promptly at one o'clock on Saturday to get the weekly premium before the head of the household had spent his pay in the saloon.

Actual savings deposits are not the sole measure of thrift, since other forms of saving have become powerful competitors of the savings bank business. Among these are building and loan associations, which have greatly expanded in assets, as shown by figures cited in the next chapter.

In a letter addressed by *The American City* to mayors in small towns, and to which fifty replied, one question asked was: "Do you believe that the prosperity and welfare of the average workingman's family have been promoted by the abolition of the open saloon? If so, has this shown itself in increased home ownership by working people?" Of these fifty, forty-one replied affirmatively to the first part of the question, and thirty-five in the same manner to the second, in addition to which a great variety of economic benefits accruing to the workingman were mentioned.[12]

It is not to be supposed that all the money not being spent for liquor is now saved, for other uses for his income have appealed to the worker. We shall consider some of these in our next chapter. It appears so far, however, that various evidences give considerable basis for believing that for the working

[12] *The American City*, April, 1927, pp. 459-465.

population as a whole, prohibition has had the effect of increasing the available income. For the great mass of wage-earners, drinking is no longer a matter of routine. Many workers have quit drinking; a large proportion drink less frequently; while those who make it at home and consume it there are relieved of the costly incidents of overindulgence. With the abolition of saloons and the diminution of treating has come the bringing home of the pay envelope. That, as a consequence of this change alone, drink is not depriving the working class home today of many of the things for which a pay envelope should be used seems to be the quite general observation of industry and of those familiar with conditions of homes.

CHAPTER IX

THE "POOR MAN'S CLUB": WHAT HAS TAKEN ITS PLACE?

ONE interested in estimating the number of speak-easies may run his estimates up as far as he likes—but how many real, old-time saloons can he count? There is a world of difference between a speak-easy and a saloon. A speak-easy that isn't a cabaret for the middle class or a night club for the rich is a spot where one goes solely for liquor, and doesn't linger. It is not a place of amusement and one doesn't become uproarious. A saloon was a recreational institution and a place to relax. One didn't need a card of introduction. Its cheery environment was accessible to all, and one talked freely with one's neighbor or listened to the symphonies of the automatic, with the bartender as the social host.

When upwards of 150,000 care-free saloons were abolished, 150,000 workingmen's clubs were abolished. What does the workingman who patronized the saloon do in his spare time now? He may still be able to get a drink of liquor, but what does he do about amusement? Are his demands for relaxation and recreation now unsatisfied? Or, as is more likely, has he turned to other forms of amusement?

Many people in a position to know are convinced

that many other forms of recreation have benefited enormously by the abolition of the saloon. They say that in these eight-hour workdays when the wage-earner has every evening to himself, he spends his money on the movies; he takes more interest in his home; he takes a ride in his car; he listens to his radio; or, if it be a week-end, he goes to ball games, picnics, and entertainments. They say that these forms of amusement are far more wholesome and satisfying. But it is not within our scope to consider the possible social advantages of this change. Our interest is confined to the economic aspects of these new habits, for the economic consequences are important in their effects upon other businesses. Has the abolition of the saloon augmented the popular demand for many other goods and services? It appears that it has; that in the degree to which the change has been bad for the saloon and liquor business, it was good for other trades catering to some of the wants which the saloon satisfied.

THE MOVIES VS. THE SALOONS

The movie industry has had an enormous expansion during the past few years. The association known as the Motion Picture Theatre Owners of America states that approximately 17,000,000 people attend such theaters every day. An estimate from a financial source, is that the 20,235 movie theaters in this country take in annual paid admissions totalling almost $700,000,000.

Prohibition is neither wholly nor chiefly the cause of this. The continuous improvement in the character of the entertainment (poor as it often seems to some of us) has made the movies an appeal and a habit to the masses of the people, while increasing wage levels have made it possible to satisfy the urge more frequently. There are many reasons why the movies are popular. It seems, however, that prohibition has aided in swelling the totals of movie goers. Those in the industry feel that with the saloons as a competitor the movie industry would not have reached its present peak of patronage. The Association of Motion Picture Producers and Distributors of America, the organization of the largest concerns, asserts: "Since the abolition of saloons the moving picture theater has become the social center and to a surprising extent the recreation of those who before frequented drinking establishments."

The Association explains that even before the days of prohibition, in the industrial districts of large cities and in some towns, the movie had already begun to cut down the profits of many a saloon, and that the liquor interests had begun to take notice of that fact. Indeed, the Association states that movies and saloons are rivals everywhere, and mentions in support a recent dispatch of the Associated Press to the effect that moving pictures are responsible for decreased alcoholism in France.

These are reasons why the movies probably did benefit, while the regular theaters did not benefit at

all, or perhaps only slightly, from the desire for relaxation and amusement which the absence of the saloon left unsatisfied. In spite of increasing expenditure for comfort and beauty, both in exterior and interior, most movies have retained their atmosphere of informality. They are conveniently located, the darkened rooms make it unnecessary for a man to "dress up," and one can come and leave when one chooses.

If the abolition of the saloon has led many men to go to the movies instead of to the saloon, it has meant that the married men were more likely to take their families, and the single men their friends. The Association claims that: "In the small town particularly it is true that moving picture theaters are a community center where men and women meet their neighbors and join with them in an evening's pleasure."

FLIVVERS VS. SALOONS

The observation most frequently met among various people consulted was to the effect that prohibition has aided the workingmen to own an automobile. One index of the widespread ownership of automobiles among people of most moderate economic circumstances is the production of Fords. From August 1, 1919, to the end of 1925, the Ford Motor Company sold 9,916,982 cars, as compared with 3,106,481 in the previous six years. In the country at large, 19,771,089 passenger cars of all

makes were produced in the years 1920-1926, as against 7,768,567 in 1913-1919, aside from the large number of cars re-sold in second-hand condition. The number of passenger cars registered in the country in 1918 was 5,621,617, while in 1926 it was 19,237,171.[1]

Prohibition is certainly not the major circumstance responsible for this increase, but is it responsible for any part of it? We have by no means ignored the important economic factors explaining the increase of cars, and had we had any tendency to do so we should have been reminded by the many instances in which they were called to our attention. We realize fully the influence of higher wages, lower priced cars, better models, general prosperity, better service, and other encouragements to ownership. We do not find many people foolish enough to credit prohibition as the sole cause.

However, the vast majority of employment managers, personnel officials, and other executives do report the abolition of the saloon as having a favorable effect upon the purchase of cars. Instances of former drinkers who squandered their pay in the saloons, but have changed their habits since prohibition, have been presented over and over again in much the same words everywhere.

As will be pointed out in a later chapter, the most effective prohibition has been achieved in those communities in which there existed employers anxious

[1] National Automobile Chamber of Commerce, *Facts and Figures,* pp. 4 and 15.

to enforce the law who also own the land or camp where the industry is located. The most striking reports came from such localities, for in those the bootlegging and home distilling that existed would naturally be at a minimum and the competition of speak-easies and open saloons the least. Coal companies, therefore, showed marked changes in conditions. The following is an example of several replies: "The effect of prohibition was almost immediate. Instead of moving about and drinking, the men now buy cars. We have built over 300 garages for our men in the last three years." That this statement may have the proper emphasis, the official states: "I have had charge in person before prohibition and since, and know what I am talking about."

An executive of a large anthracite coal company of Scranton, Pa., states: "The standard of living of the average worker has increased considerably, not merely because the wages in the anthracite field are very high, but also because these wages are now being spent for the necessities and luxuries of life rather than for drink. A survey of the anthracite field will show very few poorly clad children as compared with ten years ago. Many of our collieries are crowded with the automobiles of the workers, and savings deposits in the local banks have shown marked increases."

In the automobile trade itself, the saloon is regarded as a competitor of the car. Some automobile manufacturers seem to be opposed to its return on

that score alone. While some do not credit prohibition with being a factor in its expansion, the industry as a whole does; and the makers of the more moderate priced cars are particularly strong on this issue.

The antagonism of the Ford Motor Company to a return of the saloon is, of course, known. The sales department of the Willys-Overland Company believes that the abolition of the saloons has resulted in an increased market for passenger cars. Another concern which prefers that we do not use its name makes a strong argument of the same point and ends with the succinct assertion that: "Gasoline and booze don't mix." The Distribution Manager of the Franklin Automobile Company explains: "The sale of a car like the Franklin is influenced by the demand for used cars. In other words, the bigger the market for used Franklins, the bigger the market for new Franklins. In this respect also prohibition has, we believe, helped to provide the funds with which the purchases are made." And so on it goes among most of the makes widely sold.

THE HOME VS. THE SALOON

The comment next frequently made, coming from insurance agents in particular, was the fact that since prohibition they have much more frequently found the man of the house at home. As one agent puts it: "With few exceptions, I find the head of the house can be found at home for longer periods

and can be interviewed under better conditions. The head of the family also seems to take more interest in the home." This type of observation came from men of all shades of opinion, as for example the agent who stated: "Husbands stay at home now and entertain their friends with home-brew." A few other replies gave a similar reason.

That many wage-earners who paid little attention to the home in the saloon era have changed their attitude and are taking more interest in its condition, is an observation found so often in the returns from industrial concerns and others, that it has impressed itself as an undoubted fact. That many more things are bought for the home—the economic aspect of which concerns us here—has been frequently mentioned by those commenting on the changes they observed.

One of the consequences has been to augment the number of workers building or buying homes. Added wages, prosperity, and other factors will not account for some of the men who formerly spent a good part of their pay in saloons, for it would take no great effort under certain circumstances to spend a few dollars more a week on drinks and treats. While we are far from believing that prohibition is the major factor in the doubling of residential construction within the decade 1915-1925, what we have been told by those in a position to observe the worker makes it seem probable that prohibition had its small part in the steady sweep in the monthly average of contracts awarded in the

United States, as given out by the Department of Commerce, from 21,000,000 square feet in 1915 to over 45,000,000 in 1925, with records broken almost every year succeeding prohibition.[2] Many of the people buying homes are low-paid wage-earners.

One of the interesting comments on this is from the manager of a St. Louis plant, whose testimony is particularly in point because he takes wages into account. He says: "I have noticed a marked improvement in several ways. At least ten of our men, that I now have in mind, are buying, or have purchased, homes since prohibition where formerly they continuously borrowed money from us on innumerable occasions. I attribute the change entirely to prohibition, as our men are not earning any more than formerly and as an average are surely raising, rather than lowering, their standard of living."

There were scores of comments like the one below from a hardware manufacturer of specialties and toys in Ohio, who states: "We note the advantage of prohibition among the number of employees who were constant drinkers, as their conditions in respect to their families and homes are greatly improved under the present arrangement."

That the masses are financing a huge part of this construction is well seen in the assets of building and loan associations in the United States, which increased from $1,137,600,000 in 1913, to $5,509,176,-

[2] *U. S. Survey of Current Business,* published by the U. S. Department of Commerce, August, 1926, p. 61.

154 in 1925.[3] Numerous officials in these associations attribute part of their growth to prohibition.

Robert D. Warman, Mayor of Uniontown, Pa., who served as mayor from 1906 to 1910, and from 1914 to 1916, and who since 1923 has been in his third term, has the following to say concerning conditions in his community:

About ten years ago we had the "Brooks High License Law." In our city there were nine licensed hotels, with barrooms 100 to 120 feet long and 30 feet wide, where from fifty to sixty-four bartenders served the public with liquors from 5 A.M to 9:30 P.M. This city is the center of the Connellsville coke region. A street-car line and two railroads furnished transportation from all the little towns for twelve miles around this city. The saloons were full of people all day long.

We had a police officer in each barroom to keep the peace and to see that the saloon was run according to the Brooks Law, which forbade the selling of liquors to any one visibly affected or of known intemperate habits, the penalty being loss of license. We loaded every drunk on to the street car or train to get him home, if he could get home. Yet the lock-up was full every night, and every morning there were from forty to one hundred people given hearing for drunkenness.

The sober man was an exception. Property was cheap. Men were unreliable for work or to pay any bill. Store people who trusted failed in business. Strikes were frequent. Poverty was great. The hotel people and the rich

[3] U. S. Secretary of the Treasury, *Annual Report on the State of the Finances,* for the fiscal year ending June 30, 1926 (Washington, Government Printing Office, 1927), p. 822.

had autos and homes. The work people had nothing and when work was slack there was poverty at once.

Now the people are sober. You can ride a street car or train all day and see no sign of liquor or any one under the influence or even smell it on their person. They are saving their wages. Storekeepers do not have to trust. None fail. Property is high, for any one can buy; so many have the money that there are more buyers now. Folks that were down and out because of drink now have homes and autos.

RADIOS AND PROHIBITION

There is something cumulatively convincing in the frequency with which our correspondents and persons interviewed commented on the fact that some workers, who under the saloon era would neither have been able to buy anything because of the saloon nor been interested in doing so, have turned to radios. One of the reasons everywhere why the saloon has been popular among some of the poorest class of wage-earner can be found in the uncomfortable nature of many workingmen's homes. In many of the large urban centers, apartments have been getting smaller and smaller. With the abolition of saloons, many workers were forced to stay at home more than they had in the past. What to do to relieve the tedium? As to whether this has had any effect on the sale of radios, one can only surmise, as they were not marketed until prohibition; but the supposition is at least plausible that when the head of the house was deprived of the player

piano in the saloon and had to stay at home, he was the more kindly disposed toward a radio.

This *a priori* deduction is not proved, but it is somewhat supported by considerable testimony from industrial insurance agents, employers, and the radio industry itself. The latter regards the abolition of the saloon as a factor in bringing the radio into homes where it might not have come so soon otherwise. One manufacturer explains: "In my own experience, various chauffeurs whom I have employed, have shown an eagerness to go to their home to listen in to some particular program which was to be on that evening; whereas, heretofore, it appeared to me that they have considered their homes more or less a place to get food and shelter."

SPORTS AND RECREATION

Quite a few of those with whom we have been in touch have made comments that have both a social and an economic significance. A manufacturer in Massachusetts notes: "Workers more interested in sports, games, picnics, excursions over week-ends." Others made a point of the fact that the men spent more time with their families. Another indicates an encouraging development in his statement that: "Whether prohibition is a cause or not, it is interesting to note that the workingmen in increasing numbers are developing a lot of new interests. In our own plant the shop men are turning to golf, week-end auto trips and a lot of out-

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door activities on a scale not dreamed of a few years ago."

A questionnaire addressed to mayors of small towns by *The American City* magazine in coöperation with our investigation, and appearing in its April, 1927 issue, brought forth comments that the need for recreation had led public and semipublic organizations to increase their facilities for entertainment. Several called attention to the increase in family attendance. We are seeing a real change in social habits of recreation partly influenced by prohibition.

In the report of the Committee of Fifty, back in 1905, it was pointed out that the saloon had for a long while been meeting not only the thirst for liquor, but also the thirst for fellowship, amusement, and recreation. The statement was then made that the saloon had the field practically to itself, that: "It has had handed over to it by the community the monopoly of the social life of the majority of American wage-earners."[4] This is certainly no longer true.

ECONOMIC SIGNIFICANCE OF THE CHANGE

We have by no means considered all the substitutes which various authorities point to as having inherited some of the demand for recreation services which the saloon offered. We have taken only the

[4] Francis G. Peabody, *The Liquor Problem*, p. 147.

typical and plausible ones, because they were the most frequently mentioned. What conclusions may be drawn?

If the widespread observation of people who have been interested in this problem is worth anything at all, movies, autos, touring, radios, and other forms of recreation having an economic basis have been satisfying a good part of the desire for relaxation which the "poor man's club" met. They have not competed with the speak-easy in the case of the determined drinker, but the abolition of the saloon seems clearly to have diverted a good deal of the contents of the pay envelope from uncontrolled social drinking to planned expenditures. If that is true, and the confident statements of those in touch with the situation brings the contagion of conviction, prohibition has been one important factor in the exceptional prosperity of some of our industries catering to the desire for recreation.

While drink ended in drink, buying something else awakens desires for other things and sends out ripples of purchasing power over a large number of other industries. Thus, possession of a car makes one desire other things. It enables the owner to go to places for amusement which otherwise would be impossible. By carrying his own tenting equipment, he is able to go where he never would have thought of going, and to find new forms of recreation. The Denver Tourist Bureau in one of its recent statements, offers a comparison of the automobile camps in Colorado between 1915 and 1925.

In 1915, there were only two camps, with 4,500 campers; in 1925, some 289 camps existed, with over 700,000 campers. The director of the National Park Service of the United States Department of the Interior has kept a count of the automobiles entering the national parks. The number for the season 1920 was 128,074, as compared with 406,248 cars in 1926.[5] If prohibition has had any part in increasing the desire for autos, radios, and other goods, it has been a factor in prosperity.

Anticipating what we shall consider in our final chapter, we introduce the following comment made by a New York builder because it is so suggestive and plausible:

A very large measure of the prosperity of the country is due to the prohibition law for the following reasons:

1. In spite of the enormous sums expended for illicit liquor, the total outlay of the country is only a small fraction of the total expenditures which would be made under the saloon system.

2. Expenditures made under the prevailing system come in very large part from purses which are not seriously impaired by the expenditure, and the burden of poverty which formerly bore so heavily upon the poorer classes is not in evidence.

3. Funds formerly squandered in liquor and its attendant expenses have gone into the volume of beneficial trade so that millions of families have clothing, automobiles and, particularly, better housing, who under the

[5] From the U. S. Department of the Interior, *Annual Report of the Director of the National Park Service,* 1925, p. 65, and 1926, p. 71.

old régime would never have had a sufficient cash reserve to embark even upon an installment plan purchase.

4. It is my personal observation that the dependability of workers has greatly increased under the Prohibition Law.

These evidences convince me that the prosperity of the country and, more particularly, the prosperity of our own business, is directly related, and in a very large degree, to the fact of Prohibition. . . . Reversion to old habits will directly and quickly reduce the degree of prosperity and will have an immediate effect upon our business in particular.

It would be absurd to attribute to prohibition our present-day prosperity, but it seems equally untenable to deny that it has had any influence at all. Unquestionably, the most significant aspect of our present-day prosperity is the increased purchasing of comforts and luxuries on the part of the great masses of the people. Such phenomenal figures as the ownership of some twenty million passenger cars, the assets of building and loan associations, and similar indexes of wealth are but samples. That a part of the increase in the sale of such commodities comes from the increased purchasing power released by the abolition of saloons and the outlawing of alcoholic drinks, is an almost inescapable conclusion.

Some believe that the increased demand for many commodities has allowed larger scale manufacture and thus reduced the cost of production and distribution, which in turn have reduced the prices of those commodities to the consumer and brought

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in new classes of purchasers. Thus the diversion of money from the saloons is believed to have had an influence in that cycle of efficient production and wide consumption which is the characteristic of present-day prosperity.

PART II

EFFECTS UPON PRODUCTION

CHAPTER X

INDUSTRY'S PRE-PROHIBITION VOLSTEADISM: ITS RULES REGARDING LIQUOR

THE prohibition movement did not begin when the law was passed in some particular community, or when the Eighteenth Amendment was passed. Within industry many workers have been living under prohibition for decades, and the enforcement of industry's own Volsteadism has in many cases been stricter by far than the law itself has been able to achieve.

LIQUOR RATIONS ONCE A FEATURE OF INDUSTRY

This regimentation on the part of industry may seem natural to us now, but as a matter of fact it represents a remarkable change of attitude from that of the past. Until not so many decades ago it was the established, customary thing for employers to pass out a regular ration of rum to their employees, and they were likely to have a strike on their hands if they refused it. In other cases rum was a part of the wages.[1]

[1] An allowance for drink was part of the wage bargain in former centuries, and a worker's wages were set with or without drink in much the same way as we would today have wages with or

This was particularly frequent practice in England, but the situation was not much different in this country. When, in 1817, Thacher Magoun, a shipbuilder of Medford, Mass., determined to abolish the grog privilege, and sticking to his guns in spite of the men's refusal to work, finally succeeded in having the ship completed without the use of liquor in any form,[2] it was considered a remarkable achievement; and when James Brewster put a stop to drinking in his carriage factory in New Haven, he had to fight against long-established custom.[3]

A study made of labor conditions during the early part of the past century shows that liquor rations did not easily disappear as a cause of friction. It is stated: "The normal wage for day labor in the thirties was one dollar a day, and in Philadelphia, in 1839, the laborers struck for an advance to

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without board. Indeed, when the justices of the peace in the villages set wages, they definitely stated whether they should be with drink or without drink. An example is a set of wage rates set at the Warwickshire Quarter Sessions in 1738, in which the items read as follows:

Every mower of grass by the day—
with drink, 1s.; without drink, 1s. 2d.
Every woman in haymaking—
with drink, 5d.; without drink, 6d.
Every woman in corn harvest—
with drink, 6d.; without drink, 7d.
Every carpenter by the day, March 25 to St. Michael's—
with drink, 1s.; without drink, 1s. 2d.

and so on, including wages for masons, thatchers, weeders and others.—Bland, E. A., Brown, P. A., and Tawney, R. H., *English Economic History, Select Documents* (London, 1914), p. 547.

[2] Carroll D. Wright, *The Industrial Evolution in the United States* (New York, 1901), p. 296.

[3] John Koren, *Economic Aspects of the Liquor Problem* (Boston, 1899), p. 35.

$1.12½. This was allowed by some of the contractors, but most of them either refused it altogether or increased, in lieu of wages, the ration of whiskey. The whiskey allowance was one and a half pints a day, given out in nine doses." [4]

Early labor organizations, both in England and America, were always more or less associated with drink. Not only was it common for unions to hold their meetings and have their headquarters at public houses, but at the regular meetings there was a definite "liquor allowance" for alcoholic refreshment from the union's funds. An amusing account of a change in sentiment is supplied by the Webbs:

> In the reports and financial statements of the Unions for the first half of the century, drink was one of the largest items of expenditure, express provision being made by the rules for the refreshment of the officers and members at all meetings. The rules of the London Society of Woolstaplers (1813) state that "the President shall be accommodated with his own choice of liquors, wine only excepted." The Friendly Society of Ironmoulders (1809) ordains that the Marshal shall distribute the beer round the meeting impartially, members being forbidden to drink out of turn "except the officers at the table or a member on his first coming to the town." Even as late as 1837 the rules of the Steam-Engine Makers' Society direct one-third of the weekly contribution to be spent in the refreshment of the members, a provision which drops out in the revision of 1846.

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[4] Norman Ware, *The Industrial Worker, 1840-1860* (Boston, 1924), p. 68.

In that year the Delegate Meeting of the Ironmoulders prohibited drinking and smoking at its own sittings, and followed up this self-denying ordinance by altering the rules of the society so as to change the allowance of beer at branch meetings to its equivalent in money. "We believe," they remark in their address to the members, "the business of the society would be much better done were there no liquor allowance. Interruption, confusion, and scenes of violence and disorder are often the characteristic of meetings where order, calmness, and impartiality should prevail."

By 1860 most of the larger societies had abolished all allowance for liquor, and some had even prohibited its consumption during business meetings. It is to be remembered that the Unions had, at first, no other meeting place than the club-room freely placed at their disposal by the publican, and that their payment for drink was of the nature of rent. Meanwhile the Compositors and Bookbinders were removing their headquarters from public-houses to offices of their own, and the Steam-Engine Makers were allowing branches to hire rooms for meetings so as to avoid temptation. In 1850 the Ironmoulders report that some publicans were refusing to lend rooms for meetings, owing to the growth of Temperance.[5]

GROWING ANTAGONISM TO LIQUOR

Toward the middle of the century the hostility of employers to the indulgence in drink by workers, became general and later crystallized into tangible

[5] Sidney and Beatrice Webb, *The History of Trade Unionism* (London, 1920), pp. 203-204.

rules and practices. Thirty years ago the United States Commissioner of Labor made an investigation of the economic aspects of liquor. His report on this subject, one of the most elaborate ever made, included replies from 7205 establishments, engaged in manufacturing, mining and quarrying, trade, transportation, and agriculture, employing 1,750,000 persons.

The first question asked of employers was whether, in engaging employees, they were accustomed to consider the habits of the applicant with regard to intoxicating liquors. Of the 6976 employers answering the inquiry, 5363, or 77 per cent, reported that they did; and it was not a mere gesture, for a detailed list of the means used to detect liquor habits in the applicant was given, showing a wide variety of methods, ranging from informal inquiry to actual investigation.[6]

Many of the regulations imposed by industry upon its workers might certainly be regarded as inconsiderate of the "individual liberty" of the employee. Almost 700 concerns forbade the use of liquor at any time, either on or off duty; 1284 concerns put a similar ban on employees in certain occupations, while 1547 simply required abstinence when at work. And the penalties imposed were in some instances severe. Of 3621 concerns reporting on this, 2061 held the threat of discharge over the employee who

[6] U. S. Commissioner of Labor, *Twelfth Annual Report* (Washington, 1897), p. 70.

drank too freely. Some of these concerns gave a warning or suspension before actually imposing sentence. In addition, 32 firms subjected the erring employee to a period of suspension.

The basis of industry's growing antagonism to liquor may be illustrated by the reasons given for the rules described. Of 1800 concerns commenting on these, the most frequent reason given for the rules, mentioned by 842 employers, was to guard against accidents. The explanation next frequently made, as stated by 640 employers, was to get employees who would live up to their responsibilities—among which were included such matters as being on the alert to avoid fire, accidents, and theft, to make a good example to other employees, etc. The third in importance, mentioned by 190 employers, was their dislike for the unreliability and irregularity of drinking men; and the fourth reason, presented by 172 employers, was to guard against poor work. No doubt, among these employers, as well as among those not giving reasons for their rules, there were some who were prompted by moral and religious considerations which they applied in their business.

In 1899, a distinguished group of economists and publicists known as the Committee of Fifty published a memorable report, in which they interpreted the reason for the severer attitude that industry was taking toward drunkenness. Recalling the rations of grog common among mechanics in the early days of the century, they stated:

There are very powerful economic forces which almost compel moderation in modern industry. . . . This change has been furthered by two agencies: the self-interest of the employed, on the one hand, and the self-interest of the employers on the other. . . .

As more things are done by machinery, as trolley cars supplant horse cars, as implements of greater precision and refinement take the place of cruder ones, as the speed at which machinery is run is increased, as the intensity with which people work becomes greater, the necessity of having a clear head during the hours of labor becomes imperative, and the very conditions of modern business life necessitate sobriety on the part of the workers.[7]

INDUSTRY'S RULES AGAINST LIQUOR TODAY

This point of view is well reflected in the rules of industry with regard to liquor today. The writer sent out questionnaires on this matter to several hundred of the largest and most progressive employers in the country and has also visited many of the plants personally. The concerns from which information was secured were representative of the country at large and included about 1,250,000 employees, chiefly in factory establishments employing male workers. The preliminary question on this questionnaire read:

What are your rules or established practices (if any) with regard to employees who come to work under the influence of liquor, or who drink during working hours?

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[7] Francis G. Peabody, *The Liquor Problem,* pp. 128, 129, 133.

The replies in the first 200 questionnaires returned were then tabulated. The writer had expected to find industry intolerant of drink, but not to the extent that the compilation revealed.

Summarizing these 200 replies, drunkenness in at least 150 instances is definitely a cause for dismissal, many for a first offense and the great majority for a second or third offense. Twenty of the remaining replies do not definitely state their penalty but indicate so strong a disapproval that severe disciplinary action is implied; twelve state they have no set rule; eight use the power of suspension, the periods mentioned ranging from three days to one month; and the remaining ten send the men home for the day or leave it to the discretion of the superintendent.

In not a single instance is any sympathy expressed for the worker who is a drinker in his private life or who comes to work under the influence of drink, and there is no hint of any recognition of psychic needs for stimulants. The chief complaint is of another sort—that too often the severity of the rule must be relaxed because of the need for the offender during the rush season, his age or long service, or his special value when sober.

SOME TYPICAL REPLIES FROM EMPLOYERS

Here are some typical replies. A large paper manufacturer near Boston, employing several thousands of workers: "Even a half day's absence, if we can

prove that it is due to drinking, means discharge without notice, and men coming to work with any sign of liquor on them are treated in like fashion." A machinery concern in Cleveland: "We do not experience a great amount of trouble due to drink, as we watch our employees so closely and dismiss them immediately on reoccurrence." A large tea company in Chicago: "Any employee found using intoxicating liquor—either during or after working hours—is warned that it will not be tolerated and urged to discontinue its use completely. If the promise is given then the man is given another chance; otherwise, he is discharged at once."

An electric fan company in Michigan: "Lay-off from work for a week or ten days for coming to work under the influence of liquor. Prompt discharge for drinking during working hours." A textile mill in the upper part of New York State: "If old and faithful employees—sent home with warning—otherwise discharged—always on second offense." A machinery plant in Indiana:

> The class that was considered as temperate, if they did happen to get a little too much once in a while, knowing the stand we had taken against drinking, would remain away. If this should happen as often as once or twice a month, it would not take more than two months at the least to find the reason why and the man would be reprimanded to stop it or else be discharged.
>
> In the forty years that I have been with this company and its predecessors, habitual drunkenness has never been tolerated. That class of men has always been discharged

and was not allowed to remain in our employ long enough to form any basis for such statistics as you ask for. This referring to the habitual drunkard.

A power plant in Baltimore: "Employees who come to work under the influence of liquor or who drink during working hours are warned, and upon repetition of offense are discharged." On the waterfront of Seattle, longshoremen are under strict rules—"Ten days suspension, first offense; 30 days, second time; canceled from waterfront the third time." It should be noted particularly that: "This is a joint policy of men and management. Moreover, a foreman is similarly liable, and the men will quit ship if foreman is drunk."

The most drastic rules apply to drinking while at work. There the word discharge does not stand alone, but is accompanied by vigorous adjectives. An example is the rule of one of the largest tire and rubber companies in Akron, reading as follows: "Drinking and possession of intoxicating liquors on the company premises, will be cause for instant discharge." A Kentucky coal company states: "Any employee found drinking will not be permitted to work. Any who are found publicly drunk will be discharged. No salaried employee is permitted to drink at all." The rules of an oil refining company of Philadelphia are:

An employee found under the influence of liquor in the plant is automatically discharged—not to be rehired. An employee reporting at the gate ready for work and under

the influence of liquor may be discharged by the superintendent. Three such occasions make discharge automatic.

LIQUOR AMONG RAILROAD EMPLOYEES TABOOED

The railroads of the country, of course, have long insisted upon the sobriety of their employees. One of the cardinal restrictions in force among all Class 1 railroads is a standard rule known as Rule "G," which reads as follows:

> The use of intoxicants by employees while on duty is prohibited; their use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

The standard railroad unions back up this rule to the limit. The firemen and enginemen, the railway conductors, the railroad telegraphers and other unions, refuse to handle as a case for reinstatement the grievance of an employee dismissed for drunkenness unless he can first convince the grievance committee that the charge is untrue. The Brotherhood of Locomotive Engineers has a law requiring the expulsion of any member who loses his position on account of using intoxicating liquors, and even requires that if any member knows that another has been guilty of drunkenness, it is his duty to bring charges against him at once.

LEGAL PROHIBITION PLUS INDUSTRIAL PROHIBITION

Before prohibition, however, the lack of a law often nullified the efforts of employers to improve

conditions with regard to overindulgence, and as drinking was a legal privilege of the employee, there was a limit to what employers could do. If they banished drink from the vicinity of the plant, it was shipped in from nearby places, or made accessible in nearby communities. Prohibition put the effectiveness into industrial prohibition that made real improvement possible.

This may be illustrated by the letter of an official of the Lingo Coal Company, of New Cambria, Mo., who reports as his observation the following:

The writer has been closely associated with the different coal mines in North Missouri for the past thirty years, and is familiar with and in a position to describe comparative conditions along the lines you are seeking.

Before prohibition it was the general custom to have shipments of intoxicating liquors arrive near the mines for pay-day twice monthly, even where there were no saloons accessible. This occasioned interference with work on pay-days and for a day or two after, causing low production, disorderly conduct, and mishaps. In mines located at points where there were saloons accessible the same conditions existed, with the ill effect added of the employees spending all or the greater portion of their pay at the bar. Since prohibition these results are negligible, the behavior and reliability being much improved.

I have travelled this same territory for thirty years and today it is a safe conclusion to state that where there is one drink of liquor taken now there was a barrel drunk before, and living conditions, morals, and welfare of the different communities are better.

Industrial concerns have seized the opportunity to emphasize that abstinence today is not only desirable from the standpoint of production but a legal obligation. They have felt justified in making rules of the severest kind, since they were, in this way, only enforcing the law of the land. Thus, the experience of industry with prohibition is connected with at least two kinds of prohibition. The first is the restriction which plants themselves have set up through their own rules and regulations; the second is their experience since the Federal Government lent its arm with restrictive legislation.

An example is the Colorado Fuel and Iron Company, where "for the past 20 years the rules of the company have been that if a man comes to work intoxicated he is discharged." On December 4, 1924, the company printed the following "warning" and distributed it throughout the plant:

WARNING

This company is going to get along in the future without the services of BOOTLEGGERS or their customers.

We class as bootleggers all those who manufacture, sell or distribute intoxicants either personally or through agents or members of their own families.

Such persons will be discharged on evidence satisfactory to the management without waiting for conviction in the courts.

Employees who are customers of bootleggers or who visit bootleggers' houses or places of business will be suspended for first offense and discharged for continuations of the offense.

This was no idle threat, as confidential statistics in the possession of the writer show. Violations have been punished irrespective of rank or service, and the severity is reported as having had a very sobering and prohibitory effect on men who would otherwise patronize the bootlegger.

The effectiveness of such efforts has often depended upon whether or not the employer was able to make the full effect of his influence felt in the community. Where a plant is located in a large city in which the prohibition law is poorly enforced and bootleggers flourish, a firm's endeavors to eliminate drunkenness are usually less successful than in those localities where the industry is the chief organization of the community. For this reason the reports from mining communities and others owned by industrial concerns are exceptionally good, for in those the law is enforced both by the government and by the employer. Notable improvements were recorded by executives in such concerns. Typical of these are the following two letters, the first from the Cabin Creek Consolidated Company, of Rayford, West Virginia, an official of which presents a vivid description of the change in conditions.

I do not believe I have ever been quite sure of my own feelings toward prohibition. I have never refused a drink when offered at the proper time and place, and I have never been drunk.

I do not just know what my personal reaction to prohibition would be if I lived in the large cities, but the officials of the coal camps would have to be blind indeed

to fail to see the marked changes produced in the camps by the enforcement of the Eighteenth Amendment.

Fortunately, in these industrial centers, the prohibition officers have the backing of the Company officials, regardless of their personal views on prohibition. There is always some little moonshining, but not much; and it is so secret that the ones drinking it feel that they must get under cover when overcome.

In the last ten years I have had continuous charge of operations. During the days of booze, pay-day was a signal for leaving the camp for the nearest saloon, loading up, and returning to "light up" the village. Usually the miner in town gave no trouble; he behaved himself just as long as he could stand on his feet, but two drinks in the camp was enough to make a howling, shooting, fighting nuisance. The branch-line trains were crowded with a cursing crowd. The worst offenders would lay off the day before pay-day and manage to get enough money somewhere to give the pay-masters and clerks trouble while paying off. Those days are a nightmare to me. My only fight with a coal miner was when I was a pay-roll clerk in a mine office. He was the two—bully and drinking.

A miner drinks, usually, in order to key himself up to lick someone, and I do not believe the opinions you will get from the mining fields will be exactly fair, for miners, miners' wives, officials, and all realize that booze is a dangerous and uneconomical nuisance when brought into the coal camps of the West Virginia hills.

A reply of similar tenor came from an official of the Stearns Coal and Lumber Company, of Stearns, Kentucky, who states:

I first wrote down my personal observation based on twenty-two to twenty-three years' experience with miners in this field. I then consulted our General Superintendent, who is a practical miner himself and has been in this field all his life. He agreed with me on each of the answers.

Of course, it would be very difficult to state with absolute certainty that we are correct. However, the problem of drunkenness has been practically solved in our camps. Whereas, a few years ago it was a constant and ever present problem, today it is not of sufficient importance to mention it.

THE SENTIMENT FOR INDUSTRY'S OWN PROHIBITION

Whatever may be the differences in the points of view toward the Eighteenth Amendment or the Volstead Act of industrial heads, the type of prohibition within industry established and enforced by industry itself has shown not the slightest sign of relaxation. The restrictions are growing more and more severe, and would not be appreciably affected by any change in the law. Industry's own Volsteadism is supported by the overwhelming sentiment of management and men alike, much as they may differ on it elsewhere.

In pre-prohibition years it was often true that the saloon outside the gates was the only place where the worker who had not brought his lunch could snatch a meal or find a place to relax. When the saloons were abolished, some concerns were almost forced to provide substitutes in order to hold the labor supply and to reduce the tardiness and absenteeism of those who had to go far for their meals.

Just as we are watching a national experiment in enforcement of government prohibition, it is worth our while to see how industrial prohibition is operating. Has it proved successful?

Have discharges for drunkenness decreased? Have there been fewer employees absent after pay-days? Has labor turnover due to drink diminished? Has prohibition minimized the occurrence of industrial accidents due to drink? Has prohibition had any observed effect on the productivity of the workers? The facts and observations of the outstanding industrial plants, made available through personnel directors and others in industry, are summarized in the following chapters. A special chapter deals with the changes in the relations of salesmen to customers, as observed by seventy-five sales managers.

CHAPTER XI

HAS PROHIBITION REDUCED DISCHARGES FOR DRUNKENNESS?

IN twenty divisions of the General Motors Corporation, located in as many different cities, and employing 101,000 workers, there were thirty employees discharged for drunkenness in February, 1927. This constituted only 1 per cent of the total number dismissed for all causes. Is this a high percentage compared to former times or a low one? Would we have had fewer workers in trouble because of drunkenness if prohibition did not exist, or more? How many were actually discharged ten years ago on this score compared with today?

It should be borne in mind that the effort to get answers to such questions from industrial concerns was not applied to a random list, but to a selected group of the most progressive and representative ones in the country. The writer used the membership of the American Management Association, The Taylor Society, and similar groups because such concerns are most interested in employment management and are most likely to have available records. A large number of personnel directors were included. Hence the answers from such companies are as good as can be obtained from industry as a whole. More-

over, the writer spent hours with employment executives in such concerns, looking over employment records and making sure that through misunderstanding or oversight, valuable material was not being overlooked. If the reader will look back at the reproduction of the questionnaire, in Chapter I, he will see that questions 1 and 2 and part of question 11 dealt with this subject.

The writer must confess that in framing these questions as he did, he expected to get quite a few answers containing detailed comparative statistics. This expectation was based on the hope that while not many concerns kept records of discharges classified by causes, there would be enough who did to make a statistical comparison possible. For reasons which will be explained, many answered the question, but did not, or could not, supply statistics of the kind desired. The replies present a picture which is the only available information on the question.

WHAT INDUSTRIAL CONCERNS REPORT

The information which the author secured in visiting the employment departments of many plants is so similar to that secured in the written replies of the three hundred concerns answering this question, that we are limiting ourselves to a tabulation of the written replies. The concerns fall into four groups. The first, and largest, consisting of 140 firms, have observed a *marked* reduction in the number of discharges for drunkenness since prohibition.

A second group, composed of 52 concerns, have checked a small reduction. Ninety-five concerns, consisting chiefly of those with highly skilled employees or carefully selected groups of workers, among whom drunkenness was never much of a problem, state that their attention has not been attracted by any change one way or the other. Of the total of three hundred representative concerns replying, there were only thirteen which stated that conditions in their plants were worse, checking more discharges for drunkenness.

The more skilled the class of employees the less the troubles with intoxication. The worker selected for precision, character, and craft knowledge is much less frequent as a problem to his employer because of drink. Such testimony was offered again and again by the group of employers who reported no particular change in conditions, and by others. Two answers will suffice as illustrations.

A metal plant in New England makes a concrete comparison by relating its experience to particular departments. It states:

> We have marked in the upper right hand sheet of the questionnaires, the type of the manufacturing department, so that you can judge a little better the type of help affected. For instance, in our Polishing Department, some very decided improvement has been noticed, which is attributed to prohibition. In certain other departments, such as our tool room, where we have always employed a very high class of labor, the Eighteenth Amendment apparently has not made any difference.

A hosiery concern in Philadelphia:

As far as our company is concerned, we have never been compelled to dismiss anyone from our organization either before prohibition or since for drunkenness. Our employees are of a higher type, due to careful selection in our Employment Department; therefore this problem has never developed.

SOME INDIVIDUAL REPLIES

Some individual replies will give a more vivid picture of the conditions as the personnel managers and executives in industry have found them. The examples cited are typical, although apparently one-sided, for they are representative of the opinions given. The largest number of comments come from those who are very strikingly impressed with the improvement in conditions, as business men generally are favorable to prohibition in so far as it has affected industry.

The Booth-Kelly Lumber Company, in Oregon, writes:

Within the last month one of our foremen was discharged for drunkenness. He had been with us probably ten years, and comment on this occurrence has gone throughout the entire organization and furnished a subject for conversation for a number of days. Fifteen years ago nothing would have been thought of such an occurrence, as men were being discharged for drunkenness every once in a while and in order to keep a working organization we had to keep our eyes closed part of the

time and not see all of the drunkenness that was prevalent.

The experience we have had coincides, so far as we know, with that of all other larger lumber organizations in this section of the country.

We have not kept records as to cause of discharge. It is a matter of common knowledge among all of our superintendents and foremen that there is a marked decreased difficulty on account of drunkenness, consequently, fewer discharges.

A large oil company reports:

Discharges in this Company have always been at a minimum, the general policy being constructive criticism, building up the employee, rather than destructive snap judgment. Prior to prohibition, however, it often became necessary to remove workers from responsible positions on account of drunkenness, even though they were well qualified in every other respect; but this situation has entirely disappeared.

It is encouraging, too, that some who complain that there was trouble a few years ago find that strict enforcement in industry is now working better. A large optical company presents some figures of discharges for drunkenness which went up from six for the whole year 1915 to fifteen for 1922, but dropped back to three for 1925. The following is one of the replies of similar nature from a manufacturer of printing presses, who canvassed his foremen:

In every instance the reply was that the conditions in the shop are very much better at the present time than

they were before prohibition. From personal observation, I have noticed that the odor of liquor throughout the plant has decreased materially from what it was two or three years ago when there was more or less moonshine being brought into the plant. I am told by some of the foremen that before prohibition it was not an uncommon sight to see a wife drawing a husband's pay on account of his drinking habits—today we have no such incidents on pay-day.

The personnel executive of a mid-west branch of the Bell Telephone System reports his conclusion, based upon daily observation of conditions during long service in this concern, that "there has been an almost entire absence of intoxication on the part of our male workers since prohibition went into effect, whereas there was a considerable amount in previous years." An executive canvassing the question among the production executives of a large pottery company in Syracuse, states that they unanimously testify to a marked reduction in the number of discharges for drunkenness. The reply from the vice-president in charge of personnel in a large hat company in Philadelphia is: "I used to be the paymaster and it was an almost daily experience to have one or more men want to get their money for further drinking. Such a thing never happens now. We have not had to discharge a man for several years for coming around drunk and making a scene for us."

One of our oldest and largest railroads has kept a record since 1915 of those in the train and engine

service who had violated Rule "G," the standard rule of the railroads against drinking. This record likewise shows an encouraging decrease in proportion to its pay-roll.

Year	Total Number of Employees on Pay-Rolls	Total Number Dismissed for Violation of Rule "G"	Per Cent of Pay-Roll
1925	13,190	118	.89
1924	13,507	136	1.01
1923	14,877	180	1.21
1922	11,707	81	.69
1921	11,858	85	.72
1920	13,657	112	.82
1919	12,825	146	1.14
1918	14,588	308	2.11
1917	14,172	303	2.14
1916	12,161	294	2.42
1915	8,755	202	2.31

The Aberthaw Company, of Boston, a construction concern, writes vigorously of the marked reduction in the drunkenness of employees. A chief executive in another company in Massachusetts writes: "From recent talks with our superintendents and several foremen, whose experience has been from twenty-five to forty years, also from my own experience and observation which has covered nearly twenty years in the plant, twelve of which have been in the labor department, I am absolutely sure that there has been a very marked reduction in the number of employees who have been released because of intoxication."

An elevated railway in New England has kept records for over two decades of the number of car

and train service men discharged for the use of liquor. Between 1911 and 1925, the number of such discharges dwindled considerably, as shown below:

Year	*Number of Discharges*	*Year*	*Number of Discharges*
1926	8	1918	23
1925	6	1917	52
1924	24	1916	29
1923	10	1915	65
1922	14	1914	95
1921	7	1913	101
1920	8	1912	98
1919	15	1911	81

The Ford Motor Company, after considerable persuasion, canvassed the question among the superintendents, and writes: "The general opinion is that there has been a marked reduction in the number of employees disciplined for drunkenness." Another automobile concern in Detroit states: "Before prohibition we were pestered from time to time with men coming to work drunk. Particularly old topers who had cultivated the habit in their younger days and found it very hard to break away. Since prohibition, this condition has changed materially for the better. A drunken man coming on the job at our plant now is very rare." A third motor car company of Detroit had an average of twelve discharges for every thousand employees on the payroll in the three years 1915-1917, as against less than eight per thousand in 1923-1925.

The annual report of Thomas J. Kelley, Manager of the Hartford County Manufacturers' Association, of Connecticut, issued in June, 1927, states:

While it has been evident for some time that less and less liquor was being used by the worker in industry, we had, until recently, no definite data to substantiate this.

In the days of the saloon, intemperance was an outstanding cause of labor turnover. Because of it discharges were of almost daily occurrence in some plants and family impoverishment was a corollary.

Data now at hand show the causes of employment separations under six headings, one of which is "intemperance." These figures, involving a total of 39,000 workers of both sexes in Hartford County, reveal that out of a total of 2,479 job separations in two months, only 15, or a fraction of 1 per cent, were due to intemperance. This means that in the course of a year an average of less than 100 workers out of 40,000 would be discharged because of the effects of alcohol.

The value of these figures is somewhat impaired by the non-existence of comparative data for the saloon era. Were it possible to give the percentage for both periods on a like basis the result would be more illuminating.

The answer of the Stearns Coal and Lumber Company of Kentucky, to the effect that there has been "a marked reduction in the number of employees discharged or disciplined for drunkenness," is the more significant because it states further that "the effect of prohibition is especially noticeable because we have exactly the same class of employees that we have had for twenty years, namely native white labor from southwestern Kentucky and eastern Tennessee." Several replies of like tenor were received from coal and lumber companies. For example, among other concerns in Kentucky testifying is

the Sun Coal Company, which asserts that "all employees will agree that drunkenness has diminished."

John Morrell and Company, a pork and beef packing concern of Ottumwa, Iowa, is very enthusiastic concerning the results observed. The official replying for the concern states:

> There is no question in my mind but what this is one of the sections of the country that has been very definitely and measurably benefited by prohibition, and its effect on our business has been so favorable that we could not consider returning to the old basis.
>
> So far as the operation of our business is concerned, we can safely state that liquor has practically ceased to exist. We, of course, know that there is current talk that bootlegging, drinking, etc., is running wild. However, we absolutely know that its effect on our employees is practically unnoticeable. Our General Superintendent, states: "There has been a decidedly marked improvement in our employees during prohibition. We have very little trouble here on account of booze, although occasionally we have had a man come in under the influence of booze, also occasionally men who fail to report to work as the result of booze or bootlegging."
>
> I am firmly of the opinion that prohibition has been a wonderful help to our employees, and to our business.

PROHIBITION ONLY ONE FACTOR

Few who reported reductions gave all the credit to prohibition, and several gave it to other factors entirely. A large metal plant in Connecticut, which has had a better record during these past few years

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than formerly, writes: "But this is hardly to be correlated in time with the prohibition enactment. Other factors have entered. We have, for example, a pretty careful selection of new male employees by physical examination." A woolen company in Massachusetts, which states that there are fewer men in its employ who have periodic spells of drunkenness, explains that "the general improvement in condition of workers and families may be, and undoubtedly is, due partly to prohibition, but also partly to a higher wage scale." A telephone company official expresses his belief that the almost complete disappearance of drunken employees "is in part due to a general raising of the levels and standards of employment in our industry which has been going on through a long period of time." Thus the almost wholly favorable industrial experience with regard to discharges for drunkenness in recent years must take into account several other factors beside that of the passage of the Eighteenth Amendment, and should by no means be attributed to prohibition alone.

WHY STATISTICS ARE NOT AVAILABLE

The reader may well ask—why so many observations and so few cases of actual statistics? We are concealing nothing. The vast majority of firms fall into two categories on this matter. Either they do not keep a tabulated record of the causes for discharges, or they have kept such a record only since 1920. Of the many hundreds of questionnaires and

letters sent and personal requests made, the replies yielded many tables that dated back to 1922 or even, in a few cases, to 1919, but not more than half a dozen went back any further. Hence statistical comparison with pre-prohibition times has been impossible.

Now it is true that there are many concerns which, while they do not tabulate such information, do possess a file of every employee who has ever worked for them, and if he was dismissed, the reasons why. In these cases it would probably be possible to compile such facts from the original cards if one were to go through hundreds of thousands of records. However, a tabulation on any large scale is hardly worth while, because, for reasons apparent in a moment, it is very doubtful if one could secure from these files any accurate figures of the number of men actually discharged for drunkenness.

People who release a man for inebriety do not like to put this on the record. An executive in a large New England concern which has a rather severe policy against those who drink, puts it as follows: "Our records do not tell the tale because we have never been quite 'hard boiled' enough to write down the word 'drunkenness' behind a man's name, and we have combined all our inebriate friends with others that have been discharged for misconduct of any kind." Another states simply: "We do not make drunkenness a part of a man's record. We separate him for poor attendance, unreliability, or similar reason." Answers to the same effect have

come from scores of other firms, as the practice mentioned is general, and is a matter understood and winked at by the officials in charge.

In the hope of getting at least one set of reliable statistics showing the trend of discharges for intoxication, the writer communicated with administrative bodies required by law to keep records of causes of discharges. Fifty of the Civil Service Commissions in large jurisdictions were addressed, also police and fire commissioners in various cities. The answers received may be classified as of two kinds: either a regret that such facts were not available, or a statement that the information would be of no practical value. As the secretary of the Civil Service Commission of New Jersey states it: "Persons who lay themselves open to discharge for this reason are frequently permitted to resign, and nothing appears in the record showing the particular data which you desire."

Numerous other obstacles stand in the way of a statistical comparison of discharges over a period of years. There have been some complications which would tend to exaggerate the number since prohibition, and others which would tend to make the number appear smaller than it really was. Among such factors, one is explained by an executive in the following terms: "Even if our records did show the number of discharges for drunkenness since 1914, these would hardly tell the whole story, because men in those days were not punished with anything like the same severity for drinking as they are now. We

have gone to real extremes in insisting that our employees keep away from liquor."

CONCERNS REPORTING CONDITIONS WORSE

An effort was made to get a reason from some of the thirteen concerns which had stated that conditions were worse. It seems that in some cases the cause for an increase in discharges for drunkenness was the initiation of a campaign to oust the violators. This is obviously the explanation of a chemical company which replied:

> In order to get the latest information with reference to your letter, I have again taken the matter up with our plant located in northern New Jersey. It had an actual check made after the last pay, at which time count of the absentees showed 2½ per cent of the total number of employees, whereas a year ago it ran 4 to 6 per cent. Investigation disclosed that the absence of twenty of these was attributed to excessive drinking.
>
> But a year ago when we were having excessive absence after pay-days, we did not investigate the cause after each and every pay-day. The improvement can be attributed to a campaign started to rid ourselves of men who were habitually out after pay-day.

Another concern, located in Springfield, Mass., states: "It may be that we believe the condition is worse because formerly drinking of intoxicating liquors was a legal right, whereas now it is more or less ostracized. As we find that our men who indulge in this sort of thing do so to a worse degree

than was formerly the case, the quality of liquor which they obtain may be a very important factor."

One of the troubles arising under prohibition is that of keeping out the bootlegger. Not a few concerns have found reason for special vigilance on this score, so that their own efforts at strict prohibition within industry would not be nullified. Some of the problems to be contended with are indicated in the following comment of a manufacturing company of New Haven, Conn.: "We have many applications from men who want to work temporarily between excursions in the liquor business. These make unsatisfactory workmen. We have also lost some old, reliable workmen to the liquor business. Those that come back are no longer satisfactory workmen." Some of the concerns complaining on these scores, however, add that conditions are not nearly as bad as in the days of the saloon or before prohibition.

VIOLENCE IN LABOR DISPUTES

We have not made a special point of inquiring whether or not the abolition of the saloon has had any effect in reducing violence occurring during labor disturbances, but it has come up in our correspondence; and in our trip through Pennsylvania and elsewhere we have from time to time encountered this assertion. A machinery concern of Saginaw, Mich., wrote: "We would dislike very much to go back to the old conditions, as always in case of labor troubles the saloon was the headquarters of the

strikers, and naturally the men were not in condition to be orderly, with the result that they did things that they would not otherwise think of."

Officials of the United Mine Workers, in particular, praised prohibition for abolishing the saloon, and one high executive of this union in the Pittsburgh District was fervent in his comments, stating that in many cases his organization was blamed for violence and for destruction of life and property, when the real cause was that some men had gotten too much inflamed by liquor in the saloon environment and had broken away from the control of their officers. Because this type of advantage was mentioned in several instances, independent of any inquiry on our part, it may be of interest to the reader to quote the following testimony introduced by the "Drys" at the Senate hearings on prohibition by Bishop Darlington of Pennsylvania, who stated:

> I want to say that we have had the greatest strike that I have known in twenty-one years in Pennsylvania in the coal mines. We have had two or three before . . . the coming of prohibition. And in each case there have been outrages, there have been people injured, some property burned and destroyed, and there has been a great deal of disturbance. . . . But this time we have had the longest strike that I have known in twenty-five years there, a strike that continued for six months, with the earnest efforts for enforcement by Governor Pinchot, who has done everything he could, and with the State Police under Major Adams, the prohibition law has been very excellently enforced. I would not say it was impos-

sible in some places to get a drink, but practically it was very well enforced. . . .

Now as I said, in those six months during that strike we have not had one outrage that has been reported to the police. I have been in Mount Carmel, Shamokin and all these places, and there have not been during this strike any outrages, and it is the only time that this condition has prevailed. While there has been a great deal of hard feeling, very great suffering, and a great many bread lines, and there were threats made to do some damage . . . there has not been one outrage at all and that is due mostly to prohibition.[1]

CONCLUSIONS

With all the defects of information based chiefly on the observations of executives, there is considerable significance in the fact that so large a majority of concerns report a reduction in discharges for drunkenness, and that those who see conditions in their plants worse are so exceptional. If industry is having less and less trouble with intoxication, it is reaping the results of a strict prohibition policy of its own that it inaugurated within its walls many years ago. For, as shown in the previous chapter, quite irrespective of the Volstead Act or legislation, industry generally has been growing more and more severe with the drinker, and the industrial environment becoming increasingly repressive to the worker who overindulged.

This change in the industrial mores should show

[1] U. S. Senate Committee, *Hearings, op. cit.*, Vol. II, p. 809.

itself in other aspects of industrial operation. Has it made the worker more reliable and prompt at work? The answer of those in the best position to know will be considered in the next chapter.

In this respect this country seems to be far ahead of England. A steel manufacturer who replied to our questionnaire writes that one of the foreign executives who recently made a visit to the American plant for the purpose of studying production was astounded to find that inebriety was absent, and contrasted the situation with England, where it was all too frequent.

CHAPTER XII

HAS PROHIBITION ELIMINATED "BLUE MONDAYS" FROM INDUSTRY?

IT seems that many plants in pre-prohibition days had the five-day week long before Henry Ford ever thought of it, because so many workers were absent after pay-day. Have these "blue Mondays" been eliminated in industry since prohibition?

Pay-days, among the happiest days in the lives of some people, seem to have brought unusual troubles to the employers in large industrial plants. This was not due to what the payments did to the employer, but what they did to the workers. It appears that many went on sprees that incapacitated them for days—in any event, they didn't show up.[1]

A report on this subject of only three decades ago brings out some curious policies that employers tried in the effort to reduce the terrors of the days after pay was distributed. They used considerable in-

[1] "When the framework knitters or makers of silk stockings had a great price for their work, they have been observed seldom to work on Mondays and Tuesdays but to spend most of their time at the ale-house or nine-pins. . . . The weavers, 'tis common with them to be drunk on Monday, have their headache on Tuesday, and their tools out of order on Wednesday." John Houghton, *Collection of Letters* (1681), p. 177 (1683 ed.); cited in Edgar S. Furniss, *The Position of the Laborer in a System of Nationalism* (Boston, 1920), p. 121.

genuity. To lessen trouble from intoxication on "blue Mondays," 491 employers stated that they had changed their pay-day from Saturday to some other day in order that they might have their employees on hand on Monday. On the other hand, forty-seven concerns which had been paying during the middle of the week changed to Saturday so that those who did go on a spree would be able to sober up over Sunday; while fifty-three others tried to avoid trouble by paying wages less frequently.[2]

In a letter received recently by the writer, a mid-west company reports: "About eighteen or twenty years ago we paid off our employees on Wednesday. There was so much drunkenness that many times we were scarcely able to operate the plant the following day. Absences would run up as high as 25 per cent. On this account we were forced to change our pay day to Saturday in order that we might have six full working days." He adds, however, "Prohibition has been a wonderful help to our employees and to our business", and shows considerable enthusiasm for the abolition of the saloon.

Is his experience typical? Has the improvement he finds been general since prohibition? To secure a reply, a questionnaire was sent to a large list of representative concerns all over the country. The exact way in which the questions about employee absences was framed is as follows:

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[2] U. S. Commissioner of Labor, *Twelfth Annual Report, op. cit.*, p. 77.

B. ABSENCES, TARDINESS BECAUSE OF DRUNKENNESS AFTER SUNDAYS OR PAY-DAYS

4. Has the problem of absences or tardiness on Mondays, or after pay-days, been affected by prohibition? Please check one item in each column below:

☐ *Situation considerably improved*	*and I attribute this*	☐ *chiefly to prohibition.*
☐ *Situation somewhat improved*		☐ *partly to prohibition.*
☐ *Situation worse*		☐ *not at all to prohibition.*
☐ *No noticeable change.*		

5. Can you supply statistics of such absences and tardiness which will support your observations as given above? Check one of the following:

☐ *I am supplying statistics in columns 8 and 9 on next page of this questionnaire.*
☐ *I cannot supply the statistics now because not compiled, but we have records that might be worth your going through if you sent a representative.*
☐ *I cannot supply statistics on this because*.....

Comment .....
.....

Thus the questionnaire did not merely ask for the observations of the employers concerning this matter, but for detailed statistics.

STATISTICAL DATA LACKING

Such data were not available. There were only a few concerns which had kept statistics of absences for any considerable period, and there was not a single concern which had segregated the percentage of such absences attributed to liquor.

That is not surprising if one considers the difficulty of determining just why an employee has been absent. Assume that an employee has been inca-

pacitated by a spree, and a day or two later the visiting nurse comes to check up his illness. By that time it is likely that all direct trace of alcohol has disappeared. Wife and family are all anxious to protect the patient, and all that can be gleaned is a *suspicion* with regard to the cause. In a rubber concern of 10,000 employees, near Boston, with one of the best absence record systems in the country, the company's nurses made 30,000 visits during 1925, and could not state with assurance that liquor was the cause in half a dozen cases.

Of course, it should not be supposed that all Monday morning absences or those after pay-days are necessarily due to overindulgence in liquor. Employees absent after week-ends and holidays may have overeaten rather than overdrunk; they may have overstayed a trip, overexposed themselves to sunburn, or had difficulty in making the flivver start back. The number of men not appearing after pay-days is bound to be considerably more than on other days, because many employees who expect to quit wait until pay-day to finish out the week.

If comparative statistics are impossible to get, the next best available information is that from the foremen and superintendents, who deal with their men from day to day and know fairly well why certain of their employees are not on hand when wanted. This is not perfect evidence, by any means; but it is the best we have, and if taken over a sufficiently large scope may be considered as a significant compilation of experience.

WHAT EXECUTIVES REPORT

Omitting all information personally secured and limiting ourselves to the returns of the questionnaire, it is possible to summarize the replies to this question as follows:

Out of 287 written answers in all, 184 concerns stated that the situation with regard to absences or tardiness on Mondays, or after pay-days, had been either considerably improved or somewhat improved by prohibition, as against only 9 who state that the situation has become worse. Of the first group of 184 concerns, 88 replied that the situation with regard to absences and tardiness on Mondays and after pay-days had been *considerably* improved since prohibition, and gave the credit *chiefly* to prohibition, while 40 others also saw the situation as *considerably* improved since prohibition, but stated that this is only *partly* due to prohibition.

There were 83 concerns reporting no change one way or the other. This includes firms with highly skilled employees, which never had a problem on this score before prohibition or since. Eleven concerns reported changes for which they state no cause or which they do not attribute to prohibition.

Testimony of a similar sort has come from everywhere. At the round table discussion on prohibition at the American Economic Association meeting in St. Louis in December, 1926, Leroy D. Peavey, President of the Babson Statistical Organization, stated that he had interviewed a large number of employers

on this question, and that 85 to 90 per cent of them had reported that the situation with regard to lost time due to drink was "immeasurably better." [3]

Not infrequently replies received by the writer were similar to that of a textile concern of Boston, employing 2,700 workers, which states: "The chief advantage to us from prohibition is in more regular attendance." A comment, received early in our survey, from the production manager of a large electric manufacturing plant in New England, who was vehemently unfavorable to the effects of prohibition on every point except this one, is the gist of many later conferences. He said: "There's one thing prohibition has done; I have no doubt of it. It certainly has made the men's attendance steadier, especially after pay-days. Now I know we've paid more attention to absences and put in lots of methods since 1920, so prohibition doesn't deserve all the credit. But there's no doubt that prohibition has helped to make the men's attendance what it is."

A good comparison of present-day conditions with those in former decades, may be seen in some of the individual replies showing the difference in conditions now in various industries as compared with those before. A fiber board manufacturer of New York:

In the past, Monday was always known as "blue Monday" in pulp and paper mills. Working as we do in

[3] Typewritten minutes of the round table meeting. Minutes briefly reported in *The American Economic Review*, Supplement, March, 1927, p. 7.

crews on large machines, if any one man failed to report on Monday morning, production could not be undertaken until a full crew was at hand. Under those conditions, seldom, if ever, was there a full crew on Monday. Now, however, it is the exception when our mill cannot start on Monday morning with full crews, due to the fact that the men have been on "parties" on Sunday.

A paper company in Massachusetts:

Previous to prohibition we had a great deal of difficulty, especially in starting up our paper mill at night, by having men absent, and also had trouble because of the regular absentees after pay-days and Monday mornings. This has been almost entirely eliminated. Most of it has been due to prohibition.

An automobile manufacturer of Michigan writes:

During the days of the saloon, there would be great numbers of men missing and many would come to work totally unfit to work. It was frequent to have several from a given group or gang missing on Mondays and following pay-days, which would shut down production for the whole gang. In discussing this particular phase of the question with some of our old-timers who had experience during the reign of the saloon, and subsequent to its demise, the general consensus of opinion was that the reduction in absenteeism would range from 10 to 25 per cent. Perhaps 20 per cent would be an average. Today, absenteeism as a result of excessive use of liquor is practically nil.

A large shoe manufacturer in New Hampshire writes:

Several months ago we happened to be checking up the effects of prohibition on our factory operating conditions. We called up the superintendents who had been with us both before prohibition and since the law went into effect. Their replies were unanimously to the same effect. We no longer have, as we did years ago, to reckon with the after-effects of celebrations, holidays, and week-ends. We do have rare individual cases. Before prohibition, however, it was not at all uncommon to have departments or groups coming in unfit for work.

The superintendent of a pen company of Toledo, Ohio:

Absence after a pay-day and Saturday and Sunday, as well as holidays coming in the middle of the week, has been very much reduced since the prohibition laws have been in effect. In fact, such absences are something that seldom ever occur in our organization.

A hardware manufacturer of Ravenna, Ohio, makes an interesting comparison:

We have operated our factory under the present national prohibition and for six years previous to this under local option. We wish to say that local option showed a decided improvement over the open saloon, and that national prohibition has shown a greater improvement over local option.

When operating our plant under open saloons, Mondays and Tuesdays of each week would show a very low production. Under local option this improved somewhat, but under national prohibition at the present time the production in our plant on Mondays and Tuesdays is practically normal or equal to other days of the week.

KANAWHA COUNTY LIBRARY

A pressed steel company of Massachusetts has an unusually good record in that it is able to report: "For several years we have had only one or two cases a year of absences or tardiness or sending home due to drunkenness—which was a daily occurrence prior to 1918—several each Monday morning."

A superintendent of three hundred teamsters driving coal wagons around Boston reports that before prohibition a serious problem was faced in the failure of the men to turn up after Sundays and holidays, but that conditions improved very soon after prohibition and are so much better today that they have scarcely any of the old trouble. The director of personnel of an oil company with headquarters in New York: "Prior to prohibition, absenteeism on account of inebriety was frequent and today in our various plants and departments is practically unknown." A St. Louis metal plant summarizes its experience as follows: "We formerly paid on Monday, as paying on Saturday gave the usual 'Blue Monday.' Now we have changed to Friday, and as we are paying by check system this enables the men to deposit their checks in one of the local banks that stay open on Friday evening. We have no Saturday absences." The experience of a lumber company in Oregon is particularly interesting.

When we had local option it was quite noticeably a fact that a good many drinkers in our organization voted dry, expressly for two purposes, as they generally stated:

One, to get even with the saloon-keeper, and the other, to protect themselves from temptation. In discussions with the foremen and superintendents there is no disagreement whatever with the statement that none of us would care to go back to old conditions, where we never knew until two or three days after pay-day how many men would be available for work, and never knew after holidays and other special occasions how many would survive the drinking bouts and be able to report for duty.

In spite of the enthusiasm of many employers, it is clear that other factors beside the Eighteenth Amendment are to be given credit for the improved record. Indeed, several who find that prohibition has affected absence and tardiness favorably, feel impelled to point out that the importance of prohibition in this change may be exaggerated. They point to several other factors that would explain the improvement. There is no doubt, for example, that the better attendance records are due in part to the increasing attention to employment management since 1920, resulting in better selection and administration of labor; also, to a good deal more vigilance with regard to absenteeism, and more intensive investigation of causes, which of themselves have tended to discourage absenteeism and tardiness. We must take these for granted and not credit prohibition with being more than one element.

A Springfield, Mass., machinery concern explains:

The situation is somewhat improved, but we attribute this improvement to our being more strict in the enforcement of discipline. Formerly we had an attitude that if

a man was a first class worker we overlooked some of those weaknesses. Our policy, and I believe the policy of a good many other companies, has changed in this respect, and the men know that we will not tolerate infractions of this sort.

The best array of facts about absences is given in the reply of a large powder company of Delaware, with plants in various localities, which made a comparison of its absenteeism by analyzing the payrolls of one of its largest plants for the years 1907, 1913 and 1924 in order to try to determine if prohibition had improved attendance. These facts are given below:

Day	1907 Per Cent Absent	1913 Per Cent Absent	1924 Per Cent Absent
Monday	7.41	6.17	3.66
Tuesday	6.89	5.22	2.86
Wednesday	5.77	5.49	2.90
Thursday	5.68	5.06	2.37
Friday	5.38	5.05	2.10
Saturday	6.94	6.59	3.93
TOTAL	6.35	5.59	2.96

The company explains: "You will note that the absenteeism has become less and less in subsequent years. We feel that the improvement in attendance is more due to improvement in labor than to any influence from the Prohibition Amendment."

THE EMPLOYERS WHO FIND THINGS WORSE

As mentioned in summarizing the results of the questionnaire, only nine concerns stated the situa-

tion with regard to absences was worse. Where the reasons for this report were not given, the writer followed up the matter by written inquiry. The answers were found to agree with the explanations given by the few officials of like attitude whom the writer had interviewed when visiting plants.

Those who complained pointed out that although fewer drank, those who did were more severely affected by the present-day mixtures. An employer near Philadelphia, who claims he has been in close touch with labor employed on dredges, tugboats, and barges operated in the Delaware River, and with labor employed in sand and gravel plants near Philadelphia, asserts: "There is no question but what the wiping out of the corner saloon has been a great benefit, but many habitual drinkers have not abstained altogether since prohibition. The stuff available to labor, and there is plenty of it, is so rotten that it takes the drinking man two or three days to get over his spree." Another company, in Philadelphia, conducting a foundry concurs: "It takes longer for a man to recover his mental balance because of the awful stuff available." A fan company of Chicago complains: "Before prohibition absence was a day or two; now it is a week or more."

That the old system also incapacitated workers for long periods was, however, brought out by other replies among this group. A manufacturer who is strongly against the Eighteenth Amendment and the Volstead Act is one of several who point out that, while conditions are not good today, "when men

could get their pay checks cashed at the nearest bar, they were likely to drink excessively, and frequently they would become incapacitated for several days. Before prohibition our foreigners were inclined to make a drinking holiday of Sunday, with the result that on Mondays they were habitually tardy or absent."

The second group of explanations indicate that the conditions are believed worse in some instances for causes not due to prohibition. A car manufacturing company near Chicago ascribes the change for the worse in absence and tardiness chiefly to greater independence of the workers, coming from larger net earnings; a Bridgeport company believes that "cheap automobiles make more employees tardy Mondays than does liquor"; a Scranton coal concern asserts that a slight increase in absences on Monday is due not so much to drinking as to the tendency of employees to take week-end trips, with resulting delays due to bad weather, and car trouble. The evidence against prohibition on the question of attendance is not impressive.

That industry has lately been suffering a good deal less from irregular attendance caused by overindulgence than it did in the past is thus the general testimony. As compared with a negligible few who report conditions on this score worse, there are numerous and emphatic statements, by executives everywhere, that workers generally are steadier because of prohibition.

CHAPTER XIII

PROHIBITION AND INDUSTRIAL ACCIDENTS

THAT liquor has been an important cause of accidents, and that elimination of liquor would materially reduce accidents, has for decades been one of the accepted dogmas of industry. As recently as 1914, a round table discussion of the drink question at the Congress of the National Safety Council led some enthusiasts to post near the conference a large sign: "NEW SLOGAN—NOT *SAFETY FIRST*, BUT *SOBER FIRST*." Then, after several of those present had related various experiences of accidents connected with drink, the gathering passed a resolution for the elimination of the use of intoxicants in the industries of the nation, which began with the statement: "*Whereas,* it is recognized that the drinking of alcoholic stimulants is productive of a heavy percentage of accidents and of disease affecting the safety and efficiency of working men." [1]

That drink is a cause of accidents is unquestionable and yet this fact has had little or no support of a statistical nature, because of the difficulty of isolating this one element. H. M. Vernon, an English au-

[1] In *Proceedings, Third Annual Safety Congress* (Chicago, 1914), p. 221.

thority, studying the number of employees suffering cuts in a factory at various hourly periods, concluded that these injuries "dwindled as the average consumption of alcohol dwindled," and that the better record of women on this score was "in accordance with their relatively greater sobriety," [2] but his evidence is far from convincing. Accidents are also supposed to be closely connected with pay-day after-effects and this probably does show in the totals, but we have no clear-cut proof of it.

Have the assertions of those who said prohibition would reduce industrial accidents been proved by the experience since prohibition? Counting in war-time prohibition, beginning on July 1, 1919, we have now had about eight years under national liquor restrictions, a period ample to answer the question if the information is available.

At a congress of the National Safety Council in 1921, Dr. Lucian W. Chaney, of the U. S. Department of Labor, probably the foremost authority on accident statistics in the country, stated: "On this question of intemperance, I spent twelve years in the attempt to find records which would clearly demonstrate that the use of alcoholic liquors was a serious factor in accident occurrence. Now I know perfectly well that it has been; I may say, that it still is; but to demonstrate that class of accidents as having been caused by the intemperate use of alcohol, was so impossible that I gave it up." [3]

[2] *Industrial Fatigue and Efficiency* (London, 1921), pp. 199-201.
[3] In *Proceedings of the Tenth Annual Safety Congress*, p. 75.

That was in 1921. At that time one could have been pardoned for not going further. But today we have had prohibition almost six years longer. Has this additional experience, or more recent studies, thrown any more favorable light on the possibility of getting *statistics* showing just what the effect of prohibition on accidents *has* been?

Pains were not spared in the search for statistical data, and every possible lead was followed up. As illustrations of the efforts made to get concrete facts showing the relation of liquor to accidents, letters of inquiry were sent to the heads of every accident board or workmen's compensation commission in the states of the Union, to accident insurance companies and to organizations interested in safety; to authorities on accident prevention, and to hundreds of the largest and most progressive industrial concerns in the country. In addition, the writer made a careful study of the existing material published on the subject, visited a good many plants, and consulted personally with authorities in various jurisdictions.

NO OFFICIAL DATA AVAILABLE ON ACCIDENTS DUE TO LIQUOR

Of the official or semi-official bodies and authorities, national and state, from New York and Massachusetts to California, there was not one which had any actual figures showing the relation of liquor to accidents. Some had rather decided views and observations, but these will be stated later.

Workmen's compensation commissions in large industrial states, which might have been thought to have such records because of the defenses put up by employers when drunken employees claimed compensation for injuries, could recall only one or two cases a year, or none at all, in which liquor was an issue. Accident insurance companies, vitally interested in the causes of accidents, had not, for several reasons, segregated intoxication as a cause, one reason being that workmen's compensation commissions were antagonistic to such defenses and held the employer liable for conditions in his plant. Even the National Safety Council, the country's leading organization studying the safety problem, replied definitely that "there are no figures available to prove either one way or the other the effect of prohibition upon accident prevention."

RESULTS FROM QUESTIONNAIRE TO INDUSTRIAL CONCERNS

In previous chapters details have been given of a survey made by sending out questionnaires to a representative list of hundreds of the country's largest and most progressively managed concerns. The section on the opposite page was included on the matter of the relation of prohibition to safety.

It will be noted in this questionnaire that the question about accidents was so framed that executives might be able to dodge only the second part of the question asking for statistics, but could not very

C. ACCIDENTS CAUSED BY EXCESSIVE DRINKING

6. Have you observed any change in the character or frequency of accidents in your plant since prohibition? Check one item in each column below:

☐ *Large reduction in accidents*	*and I attribute this*	☐ *chiefly to prohibition.*
☐ *Slight reduction in accidents*		☐ *partly to prohibition.*
☐ *Increase in accidents*		☐ *not at all to prohibition.*
☐ *No noticeable change.*		

Comment .....
Any explanation that would throw light on your answer above
.....
.....

7. Can you supply statistics of accidents which will support your observations as given above? Check one of the following:

☐ *I am supplying statistics in columns 4 to 7 below.*
☐ *I have none compiled but the records available may repay further study by your representative.*
☐ *I cannot supply statistics because* .....

well avoid checking one of the four replies in the first part. Hence, we were assured of some returns, even if they were not supported by actual statistical records.

At the least, we have first-hand observations by the men at the industrial front. Summarizing all the written replies received, the answer begins to take definite form. First: Of those replying in writing (and of many others personally visited), *not a single concern answering the questionnaire* (*and not a single concern personally visited*) makes the statement that since prohibition there has been an increase in industrial accidents due to intoxication. This is rather astonishing, in view of the fact that

so many decried the poisonous nature of the stuff available to the unreformed worker. However, not many felt sure enough of the causes to attribute any change one way or the other to liquor. Two hundred and twenty-three concerns answered this question on the questionnaire; 112 concerns, constituting the largest group, checked the square marked "No change"; 47 reported a large reduction *chiefly* or *partly* due to prohibition; 27 others claimed a small reduction chiefly or partly due to prohibition; 41 additional concerns reported reductions, stating that reasons other than prohibition were responsible for the favorable showing; and 6 concerns had had increases in accidents which they stated to be due to causes having no connection with prohibition.

The reasons given for the replies make them more understandable. Safety men, employment managers, and production managers pointed out certain insurmountable difficulties in determining when an accident was attributable to drink.

A man might have overindulged in liquor the night before, and come to work nervously unstrung. But when the injury occurred, the direct evidence of liquor had by that time worn off. How classify him in such an instance? Even if a man was drunk when he came to work it would not be recorded on the books, because if he slipped by the gate and the foreman, every official concerned would, in self-defense, try to hide that fact. The tendency in all cases would be not to favor the accident insurance company against the poor fellow who got hurt. In

the final analysis, since a breath of liquor is no indication of drunkenness, how know when an accident was due to drunkenness and when to other factors? [4]

[4] Drunkenness defined. "In October, 1925, the British Medical Association appointed a committee of doctors, police officials, magistrates, and scientists to discover a definition of the word 'drunk.' After prolonged consideration and numberless experiments, the following cautious statement has been issued: 'Drunkenness should always be taken to mean that the person concerned was so much under the influence of alcohol as to have lost control of his faculties to such an extent as to render him unable to execute safely the occupation on which he was engaged at the material time.'

"This definition was not issued without elaborate reservations. The committee acknowledged that it was utterly impossible to speak of a person as 'drunk' or 'not drunk' in the sense that a man is dead or not dead. The various tests applied attempted to determine three points—first, whether the person had recently consumed alcohol; second, whether the definition given above applied; and third, whether the state of the person in question was wholly or partly due to a pathological condition. To prove that a person had recently consumed alcohol, the breath-sniffing test was by far the most efficacious, though the use of such time-honored remedies as garlic, chocolate, and cloves occasionally put the investigators off the scent.

"Tests of the impairment of control among inebriates were unsatisfactory. The effect of alcohol varies so much in different individuals, and even in the same individual under different conditions, that no universally applicable rule could be laid down which would decree that the consumption of a certain amount of alcohol made any man drunk in the eyes of the law. Five tests, however, were found that indicated in a vague way whether or not a person was under the influence. These were a rapid pulse, the repetition of certain words and phrases, the character of the hand-writing, walking a straight line, and failure of the eyes to converge.

"The baffled magistrates and police officials, though less exigent than the same class of crusaders in the United States, decided that so far as they were concerned a person was drunk whose breath smelled of alcohol and who exhibited all or most of certain traditional earmarks of the souse, including insolent behavior, loss of memory, thick speech, distended eyeballs, lack of coordination, and inability to pick up a coin or pencil from the floor. The suggestion was made that a uniform set of tests be devised like those administered in Denmark, where all the symptoms that we have mentioned and many more subtle deficiencies are taken

An authority with whom we corresponded on this point suggests:

Concerning the complexities of tracing accidents to liquor, you speak of the difficulty of knowing when an accident was due to "drunkenness." I suggest that a more exact phrase in place of "drunkenness" would be "under the influence of liquor." Present-day science shows that "drunkenness" is merely a late stage of intoxication, and that before there are any visible signs of "drunkenness," as commonly understood, mental and nervous conditions may be brought on by the effects of alcohol that may affect working safety and personal relations. I think it rather important now not to perpetuate the old idea that "drunkenness" is the test of injury by alcohol. Actually there is less danger to industry from a "drunken" employee than from one who appears sober but is yet sufficiently under the influence of alcohol to be an industrial liability.

The reality of all these difficulties is seen in the fact that scores of large companies claim that they have never had a single accident recorded as due to drink, although they feel sure that liquor was probably an occasional factor. One of the largest railroads in the East states that "we never had accidents we could directly ascribe to intoxicants." A large car manufacturing company of Illinois states that "in twenty years we never had an accident known to be due to drunkenness."

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into account. It is more likely, however, that the American plan will be adopted, whereby a man is drunk if the cop says so." (*The Living Age,* April 1, 1927, p. 644.)

The up-to-date plants, which had long before prohibition adopted means to prevent men who were under the influence of liquor from entering upon work, were least likely to see a difference. The chief surgeon of a steel-working plant in the Middle West is one of many when he states: "We have not been able to determine that prohibition had any effect on our accidents. There has been a gradual decrease in the number of accidents and the amount of lost time for the past several years, the rate of decrease apparently not being affected by the advent of prohibition."

It is obvious that the only information available on the relation of liquor to accidents is that of superintendents and executives dealing closely enough with their workers day by day to observe conditions which may not appear on records, but of which they are reasonably sure. If employers were to state that they had observed more accidents among men who drank, we should regard this as having some value. Instead, over a fourth of the concerns credit prohibition as being one factor in accident reduction, and not a single employer asserts that it has increased the accident severity of his plant.

Many of the replies are in positive tones. A St. Louis machinery manufacturer who states that now his plant has no accidents which can be traced to liquor, asserts: "Previous to prohibition many accidents were caused by 'next day after' effects." A construction concern operating in New York State, claiming "an unquestionable reduction in the ab-

sences due to inebriety," explains: "During pre-prohibition days, an examination of our accident reports showed such an increased number of accidents on Mondays and the day after pay-days that one could pick out pay-days without difficulty. This condition has totally disappeared since prohibition."

A manufacturer of carpet sweepers, of Grand Rapids, has these interesting facts to relate:

I am a member of the Board of Directors of the Furniture Mutual Insurance Company of this city, which takes care of the workmen's compensation liability for all the furniture factories and kindred industries here. Through the records of that institution we know that much less time is lost since prohibition became a law, and the accidents that used to happen before ten o'clock in the morning of each Monday as a result of "hang-overs" from dissipation of the previous day are now almost nil.

One concern tried an experimental method of securing the facts asked by the questionnaire. The reply is submitted for what it may be worth:

In order to get an idea of the comparative safety hazard of the men who do not drink and the ones who do drink, we selected at random six men who are now in our employ that we know do not drink and six other men whom we know do drink. We are rather surprised to find that during the last five years, the number of accidents among the non-drinkers was 32 while the number among the drinkers was only 26. Upon analyzing the nature of the accidents, we found that there was not a single accident among the non-drinkers that was what we call

a major accident, or, in other words, an accident where the men lost time from their work.

On the other hand, we found that there were three major accidents among the men who do drink, and all three of these accidents were of a nature that might be called pure carelessness—machines and guards were not involved.

OFFICIAL OPINION

The official opinion of heads of accident boards and other authorities seems to be that prohibition has reduced accidents. F. M. Wilcox, chairman of the Industrial Commission of Wisconsin, who ascribes an observed improvement partly to prohibition, writes: "There was a time when use of liquor was commonly referred to as the cause of accidents. In these later years, that is rarely given as a cause, and we no more hear the complaints of employers that Monday morning brings its flock of industrial accidents as the overhang of Sunday debauches." The same kind of testimony comes from Clark B. Day, manager of the California State Compensation Insurance Fund.

An industrial executive gives as his experience the following: "Some years ago while I was Commissioner of Labor, I arranged to have a big corporation set up a discharge penalty in one of its foundries for any man who was discovered drinking or under the influence of liquor while on duty. In this foundry the number of accidents was materially lessened." A Pennsylvania official who wishes to avoid contro-

versy states, unofficially: "Undoubtedly there has been a decrease of accidents due to intoxication over the period of the last ten or fifteen years, but this has also been a period of real safety effort in industry."

The *National Safety News,* of the National Safety Council, stated in February, 1926: "Fifteen years ago, alcohol was one of the greatest obstacles to safety in the average plant. The week-end spree, the Monday morning hang-over, the noonday bucket of suds, often used as a 'chaser' for harder liquor, figured prominently in many a fatality and mutilation. Refreshments smuggled into the plant and consumed on the shift also boosted the frequency and severity rates."

Not a single official gave a contrary view. A correspondent who interviewed authorities about this question on the Pacific Coast writes: "Industrial accident officials quite uniformly declare that prohibition has undoubtedly reduced accidents."

To anyone acquainted with the safety movement, it is obvious that prohibition cannot at most have been more than one of the incidental causes in accident reduction. Some of the more thoughtful executives point this out, calling attention to increased effort in developing mechanical safeguards, better safety education, and the greater insistence upon preventive measures generally, all of which have been emphasized in industry in recent years.

Some give the whole credit to these other factors. One of these is an executive in a smelting and refin-

ing firm reporting a remarkable reduction in accidents, who explains:

> I do not believe that prohibition nor non-prohibition has had any appreciable influence upon it. We have a well-organized and strongly maintained safety and welfare organization. After the armistice we were left with large stocks of metals on our hands, which necessitated a large reduction of our working force. We retained the most experienced and reliable men during the long slump which followed, and our replacements were, so far as possible, from former employees in whom we had confidence.

THE TREND OF ACCIDENT STATISTICS

It may occur to someone that since it is so hard to disentangle the industrial accidents due to liquor from industrial accidents in general, perhaps some clew to the facts might be obtained from the trend of all accidents occurring. There is almost nothing in that approach. To draw any conclusions on liquor as a factor in accidents by studying the figures for all accidents is enormously to exaggerate the importance of the liquor factor. Furthermore, all we have in accident statistics are crude figures, unrelated to the equally important aspects of man-hours worked, productivity of industry, and other related variables. For instance, when mechanical means and machinery displace hand labor, there are, in most cases, increased hazards to the operatives.[5]

[5] See the significant material in Leslie F. Hall's article, "On the Tendency of Labor Saving to Increase Compensation Costs,"

Ethelbert Stewart, Commissioner of the U. S. Department of Labor, has repeatedly warned against comparisons in crude accident figures. As he has well stated, in the United States *Monthly Labor Review,* of August, 1926, pp. 46-47:

> The crude number of accidents reported in one year might be largely in excess of the accidents reported the year before, but this would not necessarily mean that accidents were increasing. In order to answer this question we must have complete and accurate reports on, first, the number of accidents; second, the amount of exposure to the hazards of industry.
>
> The accidents of 1925 have apparently exceeded those of 1924 as certainly the accidents of 1923 greatly exceeded those of 1922. A careful statistician will ask two questions before he attempts to answer the question as to whether or not accidents are increasing: First, "Are there more men at work, or were men working more hours in 1923 and 1924 than they did in 1921 and 1922?" In other words, is there a greater man-hour exposure and what is the relation of the number of accidents to this man-hour exposure? Second, "Is there more complete and better reporting of accidents and of man-hour exposure now than formerly?" An increase in recorded accidents may mean a greater volume of men at work. It may mean better reporting.

Aside from these inherent industrial difficulties, changes in each state in the legal requirements relating to the reporting of accidents make huge dif-

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Proceedings of the Casualty and Actuarial Society, November 18, 1925, pp. 62-72.

ferences in the totals from year to year. When, in 1920, Maryland reduced the "waiting period" (the time after an injury during which no accident compensation is allowed) from two weeks to three days, the number of accidents reported for compensation naturally took a sudden leap. The same is true elsewhere. The chief of the Bureau of Industrial Accidents of Illinois writes:

> An industrial accident in Illinois as far as we know anything about it, is one that is reported to the Industrial Commission. The scope of the Workmen's Compensation Act has been steadily enlarged. There has not been a session of the Illinois Legislature at which some amendment increasing the number of reported accidents has not been passed. Moreover, the Commission has been increasingly successful in getting employers to report accidents.

Hence, crude statistics for accidents as a whole cannot play a part in the discussion.

SUMMARY

Nothing more definite emerges from the large amount of labor put into the study of this question than the observations of official organizations and industrial executives. The most definite fact on the issue as to whether liquor has become less of a factor in industrial accidents or more, is that over a fourth of all the industrial executives, and practically all official authorities, credit prohibition with

reducing accidents due to liquor, while not a single person encountered, whether personally against prohibition or not, asserts that it has made accidents more frequent.

In any event, as compared with the attention which was devoted to the liquor factor in the discussion of accident prevention a decade ago, at present this phase of the subject has become passé.

CHAPTER XIV

PROHIBITION AND THE EFFICIENCY OF THE WORKER

THE past few years have seen a most amazing increase in the productivity of the wage-earner, embracing almost every important industry in the country. In many instances the productivity of the worker had been declining between 1914 and 1919, but since 1919 the increase in industrial efficiency has been general. The output per worker in the rubber tire industry was 139 per cent greater in 1925 than in 1919! In the automobile industry and in the petroleum refining industry it was 100 per cent greater; in iron and steel, 59 per cent greater; in slaughtering and meat packing, 36 per cent greater, —and so on through almost every industry.[1] The U. S. Bureau of Labor Statistics, in calling attention to these "unbelievable" increases, goes so far as to characterize the remarkably higher productivity per worker during the past few years as "a new industrial revolution which may far exceed in economic importance, that older industrial revolution ushered in by the series of mechanical inventions which occurred in England during the last quarter of the eighteenth century."[2] This comment is justified even though comparison with 1919 must take into

[1] "Productivity of Labor in Eleven Industries," *U. S. Monthly Labor Review,* Jan., 1927, p. 37.

[2] *Ibid.,* July, 1926, p. 1.

account that that year was one of considerable inefficiency, due to war-time changes in plant and for other reasons.

As this remarkable increase in productivity has occurred at a time that happens to be the same as the period of national prohibition, the question one is naturally led to ask is: Has prohibition had any part in this accomplishment? There are many people who state positively that it has. Herbert Hoover, Secretary of Commerce, ascribes to prohibition an increase of efficiency in the individual worker of upwards of 10 per cent, stating in positive terms: "There is no question that prohibition is making America more productive." Indeed, in his annual report for 1925, in which he reviews the country's gain in national efficiency since 1920, he credits prohibition as one of the important causes.[3]

We should like to go back of such statements and report, in some quantitative fashion, just how drink does affect efficiency. We are balked, however, by at least two large obstacles. We do not know how large a part individual efficiency plays in productivity, and the effect of alcoholic beverages on efficiency varies widely with individuals and with attendant circumstances. Furthermore, different jobs require different kinds of efficiency and would affect persons in various occupations in different ways.

The first obstacle exists because it is impossible

[3] The Secretary of Commerce, *Thirteenth Annual Report*, 1925, p. 4.

to disentangle from the many elements in productivity the single element of increased personal efficiency due to abstinence from intoxicating beverages. For example, the author recently came across a lamp factory in the mid-west where certain changes in machinery, methods, materials, and management have produced almost unbelievable increases in productivity. In 1922, four thousand workers were used to produce a given output requiring only one thousand workers in 1926; and improvements are definitely on the way in which the plan calls for getting this same output from two hundred workers in 1930, and from less than fifty in 1934! This may appear to be an extreme example, but it may be matched with others that the writer collected, in a purely incidental way, in his survey.

There are many such wonders going on in industry today—marvels that are breath-taking in their comparisons. These are obviously not results coming solely or chiefly from the efficiency of the individual laborer. We do not mean to overlook the fact that productive capacity and willing cooperation have their place in productivity. But as the U. S. Bureau of Labor Statistics points out, "these are very important factors producing or preventing results in output, but it is evident that of all factors these are the most intangible and the least susceptible to quantitative measurement." [4]

[4] *U. S. Monthly Labor Review,* July, 1926, p. 19.

PHYSIOLOGICAL EFFECTS OF LIQUOR

Nor are the experimental data on just how drink does affect efficiency by any means conclusive enough to be helpful in calculating the degree to which productivity may have been affected. Most of it does prove that overindulgence in alcoholic beverages is bad—a fact which we are willing to admit without any more scientific evidence than ordinary observation and some slight personal experience. But as far as the smaller quantities are concerned, the evidence presented loses definiteness and raises many doubts. It is there that most of what has been written seems unconvincing or at least difficult to apply in our study. We have been severely taken to task by an authority on this subject, who is a high officer in a "Dry" organization, for entertaining and expressing these views, but on reconsidering the matter, see no reason for modifying them.

To secure a scientific answer, the Committee of Fifty made a careful study of the effect of alcohol on the human system and stated as its conclusion concerning alcoholic drink that, "Even their moderate use just before or during physical or mental work usually diminishes the total amount of work done. While alcohol in moderate quantities may act as a fuel food, in large quantities, and for some persons even in small quantities, it acts as a poison." [5] To

[5] Francis G. Peabody, *The Liquor Problem*, p. 22.

which may be added, however, that liquor may have psychic effects not to be overlooked. Assuming that in physiological effects two glasses of beer on a summer day contain alcohol enough to reduce efficiency somewhat, what are the psychic effects of a cooling draught on the worker's attitude towards the job in front of him?

The authority mentioned above makes the comment that while such psychic effects might temporarily increase the quantity of output, liquor would not improve the quality, or might affect it adversely. Even if this were invariably true—and one may doubt that it is invariably so—the repetitive nature of industrial jobs must be taken into account. A good many occupations are so routine that they do not involve a fraction of the conscious attention required in typewriting, printing, memorizing poetry and similar pursuits used as the bases of the experiments to be discussed. A dial feed operation, a table operation and many others in industry have a high routine quantity content.

There have been some few experiments in which it was attempted to measure the decrease in efficiency following different doses of drink. We are no authority in these matters, nor have we made a sufficient examination of the material to speak with confidence, but what we have read has mustered little enthusiasm for the results secured. Merely adding a drink or two does not necessarily produce the conditions subsequently recorded in all honesty. Causes unknown to the observer and too numerous

to mention are in some cases ignored. We may be lacking in a proper attitude toward the subject but some of the experiments seem almost humorous. Consider, for example, the experiments on typewriting while drinking, which Dr. H. M. Vernon, the British authority, attempted on a small group of persons, including himself:

I chose typewriting as the most suitable form of manual work, for it lends itself with great ease to quantitative measurement. It is true that the movements required in typewriting are more rapid than those in most industries, though not in all. Still, the movements depend essentially on accuracy in neuro-muscular coördination, or in compelling the hands to make the right movements at the right time, and in this respect they are closely comparable to many skilled industrial operations.

Typewriting experiments were made on four men and three women, and the results obtained were very consistent. In my own case I typed a memorized passage four times in succession, and at such a rate that I usually made about two typing mistakes on each occasion. After making three fourfold typings to serve as a normal, I drank my experimental dose of alcohol, and I continued to type at twenty-minute intervals for the next two and a half hours or more. The alcohol caused a slight increase in the typing time, and a considerable increase in the number of typing mistakes.

In all the experiments just described I took practically no muscular exercise during the fasting period, but if such exercise is taken, the effect of the alcohol is distinctly increased. In two experiments I bicycled hard for two hours, between 6:30 and 8:30 A.M., and as I had had no

food since the evening before, I found the exercise somewhat exhausting. Very soon after finishing my ride I started my typing. I drank the alcohol at about 9:30 A.M., or thirteen and a quarter hours since I last had food. The toxic influence of the alcohol was distinctly increased, the maximum number of mistakes made being 17.1 as against 14.4 in the resting experiments. In fact, I was not far from a state of intoxication for a short time at the height of the alcohol effect.[6]

PROFESSOR IRVING FISHER'S CONCLUSIONS

In Chapter I, a lengthy quotation was included from that part of Professor Irving Fisher's book in which he estimates that prohibition has been worth at least $6,000,000,000 a year to this country. Over half of this is held to be the consequence of the increased efficiency of labor accompanying an alleged abstinence from alcoholic beverages. This estimate by one of the best known mathematical economists has attracted so much attention that it becomes important for us to consider the nature of the research upon which it is based. We wish to make it clear that we are considering these experiments not on the ground of their intrinsic worth but only in connection with the use to which they have been put.

The data Professor Fisher supplies are contained in a section of his book called "Beer and Wine as Destroyers of Efficiency," [7] although actually deal-

[6] *British Journal of Inebriety,* April, 1921.
[7] Irving Fisher, *Prohibition at Its Worst* (New York, 1926), pp. 123-132.

ing mostly with the effects of consuming distilled spirits and similar strong drinks. It is a compilation of citations culled mainly from secondary sources, of experiments based on one, two, four, and in one case five, people. Are these experiments as a whole conclusive enough to justify their use as a basis of statistical calculations of a nation-wide character?

Professor Fisher seems particularly anxious to prove the bad effects of small doses of alcohol. He states that for each glass of beer a person drinks, no matter under what circumstances, he is reducing his efficiency at work by something over 2 per cent. Professor Fisher cites some experiments on workers who drank small quantities of concentrated alcoholic potions while at work, and then deduces that the same amount of liquor diluted in beer or wine, sipped with meals, and taken after work, perhaps during a week-end, would have the same effect.[8]

The first citation is the typesetting experiment which Professor Gustav Aschaffenburg reported back in 1896.[9] All that this consists of is that he

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[8] The Committee of Fifty included this subject in its extensive study of the liquor problem, and in 1903 published two volumes, containing 773 pages, on *Physiological Aspects of the Liquor Problem.* The findings (summarized by John S. Billings in Peabody, *op. cit.,* Chapter II), make excellent reading. They bring out several factors of liquor consumption which Professor Fisher might well have considered, viz.: the differences in the effect of alcoholic beverages in accordance with the circumstances under which they are consumed, and the great differences in effects upon different individuals, depending upon constitutional peculiarities, age, occupation, climate, etc.

[9] Professor Aschaffenburg's experiment is one of the studies included in Professor Emil Kraepelin's annual compilation, *Psychologische Arbeiten* (Leipzig, 1896), Vol. I, pp. 608-626. This

administered doses of strong Greek wine to four typesetters at a certain hour on alternate days during part of a week. On the first and third days of the week no alcohol was given. On the second and fourth days each of the workers received slightly more than an ounce of alcohol, immediately before engaging in the work which was to be the basis of the experiment. It is to be noted that the subjects were four human beings living at home and subject to all the usual influences of physiology, sex relations, home environment, etc., except that they promised to abstain from drinking otherwise than as directed. The results showed that on one worker the liquor had had no appreciable effect at all; the amount of work done by another on the two alcoholic days was about 10 per cent less than on the days of his indulgence in the ounce of Greek wine; a third did about 8 per cent less on these days and a fourth about 7 per cent less.[10]

This is one of the evidences used by Professor Fisher as the basis for asserting that an ounce of alcohol, or its equivalent, three glasses of beer, with the evening meal, twelve hours or more before the next day's work, would reduce a man's efficiency at work 10 per cent. He does not suggest that the men's efficiency might perhaps have varied just as much even if the liquor had not been taken by them.

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material and other experiments are summarized in an article on "Evidence Against Alcohol," by Professor M. A. Rosanoff and Dr. A. J. Rosanoff, in *McClure's Magazine*, March, 1909, pp. 557-566.

[10] *McClure's Magazine*, March, 1909, p. 562.

It seems to us that an almost unlimited number of factors have been ignored. A mere depressing thought at the precise moment of the experiment may explain the whole difference observed, and more. And the results on four individuals seem hardly enough to establish anything for that experiment. Many such obscure factors give cause for reasonable doubt both as to the scientific value of the evidence and its usefulness in the economic calculations.

A similar experiment cited—technically better done—is that on typewriting, reported by Walter R. Miles.[11] Here, likewise, the number of subjects involved is small—only five people—and the alcohol was given them while at work. That the latter circumstance is of prime importance in the results, may be seen in the fact that one of the chief findings is that "the effect of the alcohol reaches its maximum with most of the measurements from 30 minutes to 1½ hours after the complete ingestion of the dose." [12] Any calculation of the effects of drinking upon efficiency in the plant must first determine when most people did their drinking and how it related to the eight-hour workday.

Some of the other reports cited are even more limited in scope. One cannot, for example, take too seriously experiments which people make upon

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[11] In his *Alcohol and Human Efficiency: Experiments with Moderate Quantities and Dilute Solutions of Ethyl Alcohol on Human Subjects.* Published by the Carnegie Institution at Washington, March, 1924, pp. 29-95.

[12] *Ibid.*, p. 94.

themselves. It is not impressive that "in an attempt to memorize poetry, Professor Vogt of the University of Christiania found that on days when he drank one and one-half to three glasses of beer it took him 18 per cent longer to learn the lines"; [13] nor that Frankfurther found that he made more typewriting errors on days when he drank.[14] In these and similar cases there may be chance factors, the learned gentlemen may have suffered from the food they had eaten; or perhaps a psychoanalyst could tell us more. Even the classical experiments of Professor Kraepelin, in 1883,[15] a pioneer in the attempt to measure the effect of alcohol on various mental processes, cannot be considered as conclusive, and have been subject to friendly criticism by those who do him honor.[16]

The experiments of a more minute character, dealing not with actual tasks people do at work but with the effect of alcoholic drink on the response from individual muscles, are no more adequate than those already described. Such is the test made by Dr. L. Schnyder and Professor Paul Dubois, at Berne, Switzerland, involving the flexing of the index finger of the right hand. This experiment was made partly on Professor Dubois, but chiefly by Dr.

[13] Irving Fisher, *Prohibition at Its Worst,* p. 126.
[14] *Ibid.,* p. 131.
[15] *Ibid.,* pp. 124-126.
[16] Raymond Dodge and Francis G. Benedict, *Physiological Effects of Alcohol.* Published by the Carnegie Institution of Washington, 1915. They call attention to "the neural complexity of all his experimental processes and the unsatisfactoriness of some of his analyses as judged by present standards" (p. 242).

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Schnyder on himself.[17] Recent psychological experimenting strongly suggests that such effects as those of alcohol on the particular muscle in the index finger of the right hand, under experimental laboratory conditions, may involve better work or worse work than is normal to the individual, that is, they may not be the same as the effect on a human individual *in toto,* at his regular job under actual industrial circumstances.[18] Psychological stimuli in the pleasing sensation of a glass of beer on a hot day should not be ignored. For all we know, at times a single drink of alcoholic beverage may serve somewhat as coffee and tea, which, though detrimental as a drug, may act as an excitant stimulating the body as a whole to do work when the inclination is otherwise. We do not say that this is the case, but these possibilities do establish a doubt as to the practical importance of using these measurements of work of a single muscle as actual indexes of efficiency.

We may now summarize our opinion of the evidence cited in Professor Fisher's book: It will require experiments on a far larger scale, and under much more rigorously controlled conditions than those now recorded, to determine the effect of alcoholic beverages upon industrial efficiency with the definiteness expressed. The experiments, considered solely as bases for the economic calculations made,

[17] Cited by the Rosanoffs in their article, *op. cit.,* pp. 558-559.
[18] *Cf.* Charles S. Myers, *Industrial Psychology* (New York, 1925), pp. 44-49.

are inconclusive of themselves. There is nothing in this field comparable to the industrial experiments on such subjects as, for example, varying the lengths of hours of work, in which the output of hundreds or thousands of workers have been studied, and the reductions or increases in output definitely related to the change in working hours. When, furthermore, the kind of prohibition is taken into account which exists under the present conditions—lax enforcement of the law, spotted acquiescence by citizens in the very principle of this legislation, etc.—it becomes certain that the attempt to make anything in the nature of a statistical estimate cannot be taken seriously at this time. This is all we have intended to prove, and we have related it to a definite economic statement, the only one made, as far as we are aware.

We believe it will be best, for our purposes, to disregard experimental evidence, and not to attempt to be too scientific and solemn about this matter. All we have tried to find out is whether, when taking the working force of a plant as a whole, thus including moderate drinkers and heavy drinkers, more production and better effort has been secured as an observed consequence of the abolition of the saloons or less. This question seems to be one which may be answered in a most practical way by a consensus of opinion among those in industry who are wrestling day after day with the problem of securing more output from their workers, and who know pretty well whether the restrictions put around liquor have en-

abled them to get a better application to the job on the part of certain of their workmen or not.

THE REPLIES FROM EXECUTIVES

In the replies to a questionnaire sent out to various representative concerns throughout the country, as part of an elaborate survey already explained, only 175 concerns answered this question. Of this number 101 stated that there was either a marked increase or a small increase in individual productivity attributable either chiefly or partly to prohibition; only three claimed a decrease in productivity on this score; while, as was expected in view of the difficulty of answering this question, 72 concerns reported that they could not report a change in one direction or the other. A large proportion of the latter were concerns with highly skilled or carefully selected employees, in which the problem of overindulgence had not been a serious one before prohibition. Thus there is no overwhelming testimony on this score, and it is so involved a question that many people were in doubt about it.

But there are also many employers who state with utmost conviction that prohibition has helped industrial efficiency. An example is that of Colonel B. A. Franklin, one of the leading executives of the Bay State, who is given the cover page of *Industry*, a weekly journal published by the Associated Industries of Massachusetts, for this ringing statement: "Probably no element in the advancing industrial

efficiency has been, in latter years, more effective than prohibition. Blue Monday has disappeared from the calendar." [19]

Taking into account also the concerns which the writer visited, a majority of the total number replied that prohibition had aided individual productivity, while less than half a dozen concerns claimed prohibition to have decreased productivity. This is somewhat surprising because many executives had much to say against the ruinous quality of available liquor. Whatever the ill effects of such liquor may be, there was practically no testimony that it has tended to reduce productivity. All we can say on this subject, therefore, is that while we are concerned here only with the actual observed effects of prohibition upon productivity, we must not fail to take into account this very frequent assertion made that there may be very serious effects in the future upon the workmen drinking present-day alcoholic beverages.

The executives who assert that prohibition has increased individual productivity do not, except in rare instances, state that this increased efficiency of the worker is due entirely to prohibition. They call attention to the revolutionary changes in methods of production, involving increased mechanization of operations, elimination of many waste motions, more efficient planning, and much better management control. They point, however, to the fact that the

[19] Issue of January 15, 1927.

newer pace of industry requires a more efficient brain and a better coördinated response from the employee at work, and that in this prohibition has been an indispensable aid.

How has prohibition made the worker more efficient? We shall confine ourselves to what the industrialists report.

One of the frequent statements made was that concerns were now getting better kinds of applicants at the employment office. While other factors besides prohibition were mentioned, such as immigration restrictions, prosperity, and other influences upon labor supply, those who commented on the situation seemed to be impressed, in most instances, with the fact that now there were fewer evidences of liquor among applicants for jobs.

A cash register concern in the mid-west reports the following:

> I have gone over this questionnaire with our Dr. B., who has been head of our Medical Department for fifteen years, and with his head nurse, who handles the employees' loan fund and dispenses help to the families of needy employees. The checking of this questionnaire is the result of our consensus of opinion.
>
> We have had only a very few cases of insobriety to handle during my three years of administration. Dr. B. tells me that whereas he formerly found the odor of intoxicating drink on the breath of at least thirty-five to forty per cent of the new employees he examined, it has been a very unusual occurrence during the last several years.

A paper manufacturer of Massachusetts, one of many stating that there are comparatively few applicants who appear with liquor on their breaths as compared with former conditions, writes: "It is very unusual for us to have any intoxicated men, or men showing any signs of it, come into the employment office looking for work. Previous to prohibition it was not at all uncommon for us to have several every week." A huge electric manufacturing company of Pittsburgh subscribes to this experience in almost similar words.

This is further borne out by the statistics secured from the medical director of a concern near Boston, in which all applicants are given a medical examination before employment. His staff has handled 10,000 applicants a year for three years; yet in these three years only three of the applicants examined had so strong a breath of liquor that they were rejected. A wool products concern of Albany, N. Y., finds that "all men applying for work (with the usual floater type omitted) are cleaner cut, brighter eyed, and want to work; far different in attitude from pre-prohibition days." Another concern in that vicinity, and an oil company in New York, use almost identical expressions in reporting "a very definite betterment in which prohibition has played a large part." A food products company of Massachusetts reports: "We have less of the floating labor population applying for work. I attribute this in some degree to prohibition. I know many individual cases in this locality where men formerly drank to

excess and as a result were out of work often, but who are now working steadily." Other companies testify in similar vein, or call attention to notable decreases in the number of chronic alcoholics applying for work.

Some concerns point out the fact that there are more of the down-and-out drinkers applying for jobs at some employment offices, because they have no place in industry and it is so hard for them to get located. The better attention to selection and the closer follow-up of those absent, have made life hard for the unadjusted drinker, and he is the more frequent among the applicants, probably because he is making futile rounds of employment offices. This is perhaps the basis of an exceptional answer from an employer of Albany, N. Y., who makes a "rough estimate that of those coming in looking for work nearly 50 per cent have apparently on the way succeeded in securing something to drink."

The largest group of explanations relate to the increased physical and mental powers of employees abstaining from intoxicating liquor. A stationery manufacturer of Massachusetts asserts: "Even where a man was not visibly under the control of liquor, his feelings, desire to work and ability were in very many cases much deteriorated in the early part of the week, if not throughout the whole week. In my judgment, prohibition has been worth to industry, probably not less than $50 to $100 per year per worker, where these workers were men."

A Cleveland die concern states: "We feel that

we have gained greatly in productivity due to workers being more fit. As a rule a man who takes a drink whenever he wishes it is apt to become dull and lazy which ultimately affects production." Another Cleveland concern gives concrete illustrations which include the following: "As the nature of our manufacturing process requires employees who can withstand a great deal of heat we have noticed a great falling off in the number who come or are brought to our dispensary for treatment for heat cramps, which in most cases have been directly caused by the excessive use of alcoholic drinks."

A manufacturer of hoists and cranes in St. Louis who observes a marked improvement in individual productivity attributes it to "much clearer brain than when liquor was freely accessible." The expression "clear-headed" appears again and again in this connection.

Other replies extolled the better type of worker today. A wire company of New Haven, Conn., notices "greater interest and intelligence in work, and more reasonable attitude"; a Boston concern is impressed with the added alertness of the worker; and a castings firm in Cleveland feels that there is a "better morale and plant spirit, at least partially due to prohibition." A Chicago firm selling a food product through salesmen from house to house is impressed with the cleaner character and better habits of its salesmen today. The effect on the latter has been investigated separately and is discussed in the next chapter.

A COMMENT ON PERSPECTIVE

We are not analyzing these statements in detail, and we realize that employers may be ascribing to prohibition some results for which it is not responsible. Nor are we unaware of the possibility that the replies may be an incident of traditional and unfounded prejudices, such as have not been infrequent among the employing class. To illustrate by a safe and distant example which adds to one's perspective, it was not so long ago that employers held up their hands in horror because workingmen and their families had acquired the habit of drinking tea, and what was worse, were imbibing this beverage with sugar! As interpreted by an historian of the labor movement:

> The solicitude of the social observers of the eighteenth century over the increased consumption of tea and sugar appears almost ludicrous to the modern mind. It is in part to be accounted for by the fact that the beverage was seriously believed to be injurious to the health of the drinker; in part, by the natural impatience of the heavily taxed rate-payers with the unnecessary extravagance of the pauper; but largely, also, by the conviction that the habit of tea-drinking was wasteful of time and destructive of industry among a class of people whose duty was to labor continuously.[20]

It may be said, however, that many employers realize the complexity of isolating the factor of pro-

[20] Edgar S. Furniss, *The Position of the Laborer in a System of Nationalism* (Boston, 1920), p. 154.

hibition in evaluating the present situation, as will be illustrated by two quotations. One writes:

Unquestionably we are having a great deal better condition in our plants today, as far as the men are concerned, than previous to 1919 or 1920. We cannot attribute this condition, however, to anything produced by the Volstead Act. During the period when our mills were running full capacity in Minneapolis, somewhere around 10 per cent of our employees were more or less of the floater type. This particular class of labor was always very uncertain and particularly uncertain each pay-day. Naturally their home conditions were not of the best. When our production was reduced in Minneapolis, this type of employee was practically eliminated and we have today in our organization 15 per cent of men who have worked for us twenty years or more, fully 50 per cent who have worked ten years or more, and the balance of our crew, five years or more. Am quite sure that if the saloons came back tomorrow, the conduct of these men would not be affected at all and their home life would probably be as good as it is at the present time.

Another executive, who believes that prohibition has had a good effect upon industry, but cannot support this by evidence tangible enough to convince the skeptic, comments as follows:

Without doubt, economic and industrial conditions in our plant are better than they were ten years ago, but how much of this is the result of the 18th Amendment and the effects of prohibition, and how much is due to other causes, we cannot say. We select employees with more care today. We provide better working conditions.

The hours are shorter and wage rates have increased. We train our men better. We take better care of them while they are working and when they are injured. All of these things have an effect upon labor efficiency. We have no statistics to show how much change in labor efficiency is due to so-called prohibition and we do not feel justified in expressing an opinion.

Thus it seems our function is to report what the executives say, and let the reader weigh the value of it for himself.

We have already discussed the question of whether prohibition has had any effect on attendance, in our previous chapter on "blue Mondays" in industry. We are referring to this subject again because many concerns answering the questionnaire commented on it a second time when replying to the question about the effect of prohibition upon individual productivity. They emphasized the effect of punctuality, of full crews on Mondays and after pay-days, of lower labor turnover, and similar factors in production.

LABOR TURNOVER AND PROHIBITION

Whether labor turnover has been affected by prohibition or not, one fact is undoubted: The extent of the labor turnover has never been as satisfactory to American industry as a whole as it has been during these past six years.

The writer himself did not at the outset believe that prohibition was in any vital way responsible for this, but executive after executive mentioned this

fact as something resulting in some degree from prohibition. Labor turnover was an extreme problem in the boom year 1920, and with improved labor management and a change in economic conditions in these past few years, labor turnover figures had to be lower; but concern after concern supplying obviously careful and honest answers credited prohibition for part of the progress made. A metal construction company of Jamestown, N. Y., for example, writes: "We have noticed a perceptible decrease in our labor turnover, some of which is without question due to prohibition."

Whether or not prohibition has played the part in the reduction of turnover that some executives believe, this fact remains: Of the large number of concerns investigated, a decrease in labor turnover since prohibition is reported generally, and a good many concerns believe that prohibition had some part in it.

PROFESSOR CARVER ON DEPENDABILITY AND "VERTICAL MOBILITY"

Professor Thomas Nixon Carver, of Harvard University, has called our attention to an aspect of the liquor problem which he considers especially important. As we have made no special investigation of the matter, we shall content ourselves with quoting his most interesting comments on the subject:

> There is one topic which seems to deserve more attention than you gave it, namely, the effect of drink on demotion and the prevention of promotion in industry.

This problem interests me so much because I am particularly interested in the wage question, or the poverty problem in general. Class poverty, as I see it, is primarily or mainly a problem of occupational congestion resulting in low wages and unemployment. The cure for occupational congestion is occupational mobility. Horizontal mobility, that is, the movement of laborers from one occupation to another requiring about the same general degree of skill, ability or dependability, seems to take care of itself pretty well. Vertical mobility is the difficult movement. Anything that makes it easy for men to rise from the congested to the uncongested occupations, tends to relieve the congestion at the bottom, or tends to enable laborers to diffuse themselves throughout the industrial system in such ways as to prevent congestion.

On general principles, I should assume that drunkenness, or anything that tends to destroy a man's dependability, would tend to prevent his promotion or cause his demotion, thus increasing the congestion in the lower occupations. Anything which makes for sobriety should, other things equal, increase the rate of promotion or decrease the rate of demotion, and thus relieve the congestion at the bottom.

It is important, however, to bear in mind that I am not discussing merely the promotion from the unskilled to the skilled manual trades, but the keeping of an open road for promotion all the way to the very top of the industrial scale. If we can facilitate the movement upward, even into the high managerial positions, so as to make high grade managers abundant where they would otherwise be scarce, this will cause expansion of industry. The limiting factor in the expansion of industry is seldom

the lack of unskilled workers; it is almost invariably the lack of high grade men. To remove this limiting factor, therefore, requires that men of the highest grade should be multiplied, if that is possible. If that can be done, it will make more jobs for men in the lower grades.

From my own limited observation, I am convinced that one important factor in preventing promotion, in maintaining a scarcity of high grade men, and at the same time increasing the superabundance of low grade men, is drink.

Again, if in the very process of increasing the number of men of the highest grade you are depleting the number in the lower grades by promoting men from them, you have two factors at work to raise wages; first, the expansion of industry, tending to increase the demand for manual workers; second, the thinning out of manual workers, tending to decrease the supply. The general results of these two tendencies is a new equilibrium in which the equilibrium wage is much higher than it would be if these tendencies were not in operation.

In the last six months of 1926, an extensive, nation-wide survey of the effects of prohibition was carried on by the National Federation of Settlements, under the direction of Mrs. Martha Bensley Bruère. Written returns were received from 150 industrial cities and towns, and Mrs. Bruère traveled all over the country interviewing people about prohibition. She reports few points on which people agree, except on certain industrial effects. Her conclusion on the point under discussion is: "There has been a long period of steady work. Whether this is because of prosperity or because of the Amend-

ment is a cause of controversy, but that men work more steadily since the Amendment is testified to by employers everywhere. . . . Employers everywhere are agreed that the law is a great benefit to the workingmen and a great aid to efficient operation of industry. They are for it." [21]

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[21] Martha Bensley Bruère, *Does Prohibition Work?* (New York, 1927), pp. 297-298, 301.

CHAPTER XV

DOES THE SALESMAN HAVE TO CARRY A BOTTLE?

A LETTER was given to the press on November 1, 1926, by the Citizens' Committee of One Thousand, containing an appeal by Lincoln C. Andrews, then Assistant Secretary of the Treasury, to big business heads throughout the country, to halt the practice common in some quarters of salesmen treating customers with liquor. In this letter General Andrews cited his own observations, just previous to his taking office, when at conventions of the street railway business, the agents of railroad supply houses were present as hosts having large supplies of liquor. He asserted: "What is true in this business is undoubtedly true in other big businesses."

In order to get an idea as to how widespread this practice was, and more particularly whether the situation has been improved or made worse by prohibition, a letter was addressed to sales managers and sales executives in representative concerns throughout the country. In addition, the writer interviewed a number personally and used his opportunities in travelling about to get the point of view of the man actually carrying his own grip from city to city. Considerable feeling was expressed in many of the replies.

SELLING OVER THE BAR IN THE OLD DAYS

The survey brings out the fact that up to about two decades ago the custom of selling with the aid of liquor was a widespread practice and evil in business. As one experienced sales manager puts it: "It was not at all unusual in the old days when a salesman called upon a merchant, as a first move to invite him down to the corner saloon for a drink." It is pointed out that in these parties the salesman had to be a liberal host and be in no hurry to leave. Another claims that this helped in many cases to get the business, since: "A bottle of whiskey did loosen up many an order, and a few drinks succeeded in inducing a merry mood that destroyed both doubt and discrimination."

Often the pressure upon the salesmen to buy liquor was one he could not very well resist. One sales director writes: "I can remember as a cub salesman working the retail grocery trade, having to transact business over the bar. Since in the old days, the grocery store was generally combined with a saloon, one had to buy beer for the bar-flies, and you were looked upon with disdain if you ordered soda water—because it was less profitable, I presume."

The type of relationship formerly existing in the conduct of selling became so demoralizing to the men on both sides of the transaction and was so contrary to good business practice that it began to be questioned. The manager of a high speed steel company

states: "It may interest you to know that of all the salesmen we found it necessary to drop from our organization during these earlier days, nine out of ten were discharged because they became incompetent and unreliable through drinking." This concern and many others stopped employing salesmen who were in the habit of drinking, and put the emphasis on other means of appealing to the buyer.

THE CHANGE IN ATTITUDE

On the side of the buyers, too, a certain amount of prejudice began to spring up against salesmen using such methods. Under the stimulus of keen competition, and with the influence of large corporations, the average buyer bought more on quality, price, and terms, and was not overimpressed by the salesman who was free with his offers to treat. Even before prohibition this type of selling was gradually coming into the discard. The whole idea of entertainment of buyers began to be reconsidered, and the more intelligently administered concerns began to insist that treating a buyer to a meal or to refreshments should be done only in the occasional instance when the circumstances made it the natural thing to do in conducting a transaction, as against the indiscriminate practice for the purpose of influencing an order.

The old type of salesman who wore his hat cocked on the opposite side of his head from that in which he chewed at his cigar, and who "set up" his custom-

ers and got them half drunk as a preliminary to getting an order, has thus become a picturesque type in industry that is as antiquated as the two-gun man popularized in western melodrama. Concerns today, when selecting representatives, have little eye for the man of irregular habits. They choose with care clean-cut, efficient men, whose personality and character will dignify the house.

As one sales director puts it:

> In these days of high-pressure competition, salesmanship has changed materially from the days of the big black cigar, the gaudy necktie, and the huge expense account for entertainment. We have come to the point where salesmanship is on a highly organized efficient basis, where, in the majority of lines, the expenditure of an extra dollar, or the loss of an extra hour, tells its tale on the balance sheet for the week or the month.

REPORTS ON CONDITIONS TODAY

Practically all the sales executives replying to our letter pointed out that liquor as a factor in business relationships had begun to decline even before prohibition. Two-thirds of them state that prohibition has been an aid in reducing the evils and the expense of treating with liquor when selling; a few state that they never did business on that basis, and over a fourth call attention to one aspect or another unfavorable to prohibition or characterize conditions as worse. Practically all agree, however, that the internal problem of handling their salesmen in this

respect has been greatly simplified in the past few years, so that it is practically no problem any more.

Liquor as an aid to selling has by no means disappeared, and lots of it is still consumed between buyer and seller, but it has very much less standing as an actual factor in influencing the order. The larger and more progressive concerns base their appeal on quality, price, and service.

Drinking in business, where it occurs, is likely to be something coming after the transaction, or during the gaieties of a dealers' convention, not while the order itself is under consideration. Several sales managers replied in the same spirit as the following: "The present use of alcoholic liquors in connection with selling is very largely confined to the entertainment of personally known consumers, friends, and guests at trade conventions and in a restricted manner. The motive behind such entertainment, while primarily to strengthen friendships, is to my belief seldom employed for the immediate transaction of business."

Only in certain lines that are laggards in their standards do the buyers still allow the indirect bribe of a drink or a bottle to play a part in their relations with salesmen. In the larger corporations such gifts are frowned upon, and the buyer who gives orders to the men he runs around with at night is an object of suspicion.

The situation, as seen by one sales manager, is one demanding salesmen of the cleanest habits. He

states: "Regardless of where prohibition may be leading us, it is a fact that in selling, even those buyers who imbibe the forbidden juices look with distrust upon the salesman who appears in their presence with the odor of alcohol on his breath, and I might add here that tobacco is rapidly falling in line. Our salesmen are instructed not to have the odor of tobacco on their breath when calling on a prospect unless they are absolutely sure that the buyer uses tobacco in his own office. I have seen more than one sale lost on tobacco."

One of the facts brought out is that the abolition of the saloon was of considerable aid in causing the decline of the treating habit in the relations of traveling salesmen with their local customers. A large tobacco company reports on the difference it has observed in the expense accounts of its traveling salesmen. It states: "Our trade expense for treating per man during the days of the saloon averaged about $10.00 per week, while today this trade account represents less than 25 cents a week per man. We also have less difficulty in handling our men and less difficulty with our customers, as the reflex of making promises beyond the established trade custom was sometimes made by our representatives while under the influence of liquor; indeed, sometimes the customer would exact these promises while the individual was not in his normal state."

A chemical company observes: "The old-time salesman who thought it his right to overindulge and lay off for a week is rapidly disappearing. In

one line of our business we still have one who does that every four to six months, but we are trying to replace him. We believe, from personal observation, that the disappearance of the objectionable saloon has done a great deal in stopping the practice of treating in all walks of life."

A metallic bed company reports: "The salesman who drank was more than a problem—he was in the main unreliable and inconsistent. His work was very uneven, and could never be measured with any forethought. We are very happy that drinking is no longer the great factor in selling that it has been, and good fellowship today is more real." Another concern says: "The effect of prohibition on the earning capacity of the salesman is undoubtedly good. I personally know of a number of men who before prohibition were unable to hold a steady job, and who are today industrious, self-respecting men earning good incomes."

Many incidental advantages of prohibition have been claimed by sales managers and salesmen acquainted with conditions. One of the most striking of these is the following: "One change affording me great pleasure is the absence—almost absolute absence—of drunken passengers on the trains of the railroads throughout the South and Southwest. Before the days of prohibition there were trains on certain railroads I never dared ride on, because they carried no Pullmans and the coaches with crowds of drunken and drinking men were unbearable. Today one can ride in the coaches of any train on any

railroad in the South and not be pestered or disgusted by the presence on board of a lot of noisy, blasphemous, and puking drunks. During the past three years I traveled on the railroads seventy-seven thousand miles and during that period and over that great distance I encountered only three intoxicated persons, and they were only slightly intoxicated."

The process of selling has thus been made more efficient. Instead of hanging around the bar all morning with a single prospect, contacts are devoted chiefly to the time involved in transacting business. As one of the firms commenting on this states: "Men can devote more time to carrying on our business, as it was necessary in the olden days to spend a lot of time in the saloons, often resulting in their being incapacitated for work for the balance of the day, or possibly also the next. As an illustration of the change, our average calls have increased per man about 40 per cent. With a large crew of sales promotion men, this is a tremendous factor."

The sales executive of a large writing machine company claims: "It seems to me that the question is not debatable that the present condition, so far as it applies to salesmen, is very much better than it was in the old days, and that sales managers have much less trouble with salesmen today than they had in the past. In the old days I tried to reform several salesmen, but my attempts to stop their drinking were not very successful."

SOME SALESMEN STILL USE OLD BAIT

But the improvement is not observable in all lines, and some selling with the aid of liquor still persists. To put it in the language of one of the sales executives replying: "The life of the salesman, even today, is such as to make him ready and willing to accept anything that will promote a spirit of friendliness and I am told there are sample lines that feel that it is necessary to carry a quart in the trunk for emergency purposes, when the buyer of the company calls at the hotel sample rooms." As a means of tempting the buyer known for a thirst, some salesmen hint that they have some particularly good liquor which they would like him to sample. They may leave a bottle of liquor as a souvenir of their visit to the town. There are other salesmen who, as one manager puts it, "like to pose as smart Alecks," and indicate their breadth of knowledge on this subject, so that there has been some tendency to regard a salesman as a clearing house for information about liquor.

A few sales managers state that there are sales departments that consider it the smart thing to have liquor on hand even in their main offices, when customers call, especially those from out of town. One claims that the situation developed since prohibition, and that "such things as business men having bottles in their desk drawers was seldom heard of then," whereas they are frequent today. The sales manager of an Indianapolis concern states:

Since saloons have practically disappeared "selling over the bar" has gone with them. However, in many instances today, the bar (for you may practically call it that) has been transplanted into the manufacturer's office and show room. I know of very few manufacturers in innumerable lines in New York who do not carry liquor in one form or another for those clients who care to have it. Differing from the pre-prohibition days, however, I do not believe that the average customer is asked to have a drink until after business is transacted, and, in most cases, they prefer to give it to them to take away if they care to have it.

This has put some concerns at a disadvantage with certain buyers. There are many looking forward to the time when treating with liquor will become as much an exception as bribing a buyer with funds is in business today, but they cannot be as severe as they wish because of competitors who persist in using liquor as a bait. A sales manager relates:

One manufacturer with whom I am acquainted issued instructions to his salesmen at conventions not to do any entertaining by serving liquor. In this particular case, the salesmen felt tremendously handicapped because their competitors were entertaining lavishly. I know that they, on their own personal responsibility, did some entertaining. The salesmen representing this particular manufacturer are very high grade and realize that they are not trying to buy business with the entertaining which they do, but resent being classed as reformers and feel that in order to keep up they must do a certain amount of entertaining.

The sales executive of a large chain belt company states: "I believe that during conventions you will find as much drinking now as in the old days and possibly a little bit more," but he adds that "there is no doubt that the use of liquor to secure orders is passé and the salesman who uses this method now would be very much discredited."

SALES PRACTICES IN TRANSITION

The replies received indicate that the sales side of business has been going through a development closely akin to that already achieved on the production side. Just as the newer pace in the factory has made sobriety essential to efficient production, the sales side of business has been sped up to an unprecedented degree by the intense competition of recent years, and has forced temperate habits. Factory operation, as shown in an earlier chapter, has evolved from the common practice existing less than a hundred years ago when employers themselves passed out grog to their workmen, to a time when both employers and workers became so hostile to drink when at work as to make it taboo. In the same way, higher standards have evolved in sales departments, and the competition in most lines is making it as difficult for the immoderate salesman to maintain the pace as it is for the overindulgent worker in the factory.

Prohibition, by abolishing the ubiquitous saloon, has been an aid to business in removing the tempta-

tion to talk over things at a bar; but coming as it did while the transition in the sales field was not yet complete, and some buyers and salesmen remained who like their liquor and still mix it with business, the Eighteenth Amendment has by no means eliminated the serving of liquor as an indirect inducement in sale. Conditions vary a good deal according to locality and trade. The experience of a paint and varnish salesman, selling to mechanics of European origin accustomed to drink, is somewhat different from that of an office appliance salesman selling to chief clerks and office managers. There is a difference in the experience of a salesman dealing with the retail trade from that of wholesalers among each other. In summarizing the replies, we have therefore pointed out the general tendencies.

One might expect to find that the progress in eliminating liquor from business has been slower among those in the selling field than among the production men, because it is precisely among the people of higher financial circumstances, among whom many buyers and salesmen are represented, that the bootleggers get their fanciest prices and we find the law taken least seriously. In their contacts with people who drink, concerns are inclined to observe the custom of the class, just as they are inclined to observe the customs of a country into which they go. Business is usually given first place in most situations, however, and as concerns are not anxious to mix liquor with business, they are tightening up their regulations. Some have not only issued in-

structions to their salesmen not to do any entertaining by serving liquor, but they do not approve an expense account with such an item.

On July 22, 1927, the *Christian Science Monitor* carried an item on this matter which is suggestive of the progress being made in the campaign to eliminate liquor as a factor of commercial transactions. This item reviews the past efforts of the Citizens' Committee of One Thousand, and gives the results of the appeal sent out to business men in connection with General Andrews' letter, mentioned in the beginning of this chapter. As we have not had time to secure information on this first hand, we quote from the article appearing in the *Monitor:*

Large business organizations throughout the United States are generally for strict observance of the prohibition laws, and disrespect for these laws among such concerns is negligible, according to replies received to a letter sent out by the Citizens' Committee of One Thousand.

In this letter the committee appealed to large business houses to encourage their employees to respect the prohibition laws. According to Fred B. Smith, chairman of the committee, the replies so far received indicate there is a large proportion of law enforcement sentiment throughout the country.

The committee's action followed a letter sent to Mr. Smith by Lincoln C. Andrews, then Assistant Secretary of the Treasury, in which he called attention to some large sales organizations' practice of supplying liquor to their salesmen to entertain customers.

Andrews deprecated the practice, "even from the economic point of view, because in the end the purchaser pays for the costs of salesmanship," and declared that approval of "expense money" used to purchase liquor, was contrary to the general policy of big business interests which have openly declared their support of the prohibition law and its enforcement.

The committee sent to the officers and managers of about 20,000 of the largest organizations in the United States letters urging them to coöperate to the fullest extent in the preservation of legal, orderly methods of government.

"We received replies to about one-half the letters we sent out," Mr. Smith said. "About one-half the replies contained the information that it was already the fixed policy of their organizations not to permit any representatives to buy liquor for entertainment purposes.

"In a very small number of replies the writers professed to have no respect for the prohibition law and said they did not intend to respect it. This number was so small it was encouraging.

"The remainder of the letters which came to us in response to our request stated frankly that where the managers of these organizations had not in the past been particularly careful to assure themselves that 'expense accounts' did not contain sums spent for liquor, they would in future take the matter up with the heads of their various departments and see that the practice was stopped.

"One business man who employs 800 salesmen told me that when our letter reached him he saw that it gave him an opportunity he had been wishing for. He had wondered for some time, he said, whether any of his sales-

men's expenses were for liquor, but had hesitated to take the subject up with them. Our letter gave him the opportunity to open the matter and to have it clearly understood that he would not approve any expense items for liquor."

Thus, while violation of the law when transacting business is still all too frequent, there are indications that the practice will become less of a problem, just as the drinking or coming to work drunk is practically gone from factory operation. Already numerous concerns have taken a firm stand on the question. Typical of the improvements observed is this reply of one sales executive: "For a number of years I have been connected with the purchasing of gas and electric appliances. In this branch I know of no cases where any selling has been done with the aid of liquor." There are difficulties in securing observance for a new law among a generation of buyers and salesmen accustomed to the old practices, but the liquor evil in selling seems gradually to be passing.

CHAPTER XVI

IS "MODIFICATION" THE ANSWER TO FARM RELIEF?

AT almost every proposal for farm relief during these years of grave agricultural distress, there have not been lacking publicists and legislators who assert that modification of the Volstead Act or the repeal of prohibition is the first step to take. The debates in Congress since 1920, especially those on the McNary-Haugen Bill, have frequently been punctured by sallies from those who advocate lightening the liquor restrictions as the best way to reopen a profitable market for the farmer.

As an example, the *New York Times* of May 7, 1926, carried an item in which it stated that during discussion of the pending agricultural relief legislation, Representative Black, Democrat, of New York, called attention to the fact that "since prohibition there has been a loss in farm values of $15,000,000,000," and that "the answer to the farm problem is light wines and beer." On June 10, a few weeks later, the *Times* reported that Representative Boylan of New York, Democrat, and Representative Schafer, of Wisconsin, Republican Insurgent, had interrupted a speech on farm relief by assertions that enforce-

ment of the Federal dry law was responsible for the economic plight of the American farmer, and that he could expect no substantial relief until the law was either modified or repealed.

The same issue comes up again and again over enforcement laws in the states. An instance is a leaflet for popular distribution issued recently by a former Chief Justice of the California Supreme Court, Matt I. Sullivan, who urged repeal of California's Wright Act by pointing out that since January, 1921, the value of the country's farm land and equipment had decreased by over twenty-three billion dollars, and that "one of the controlling causes of the above decrease is the farmers' loss of the profitable market for barley, rice and other cereals used before prohibition in the manufacture of beer."

One cannot help wondering whether this is really true. Statistics showing the quantities of agricultural products consumed by brewers and distillers make an impressive array. But one must compare these figures to the country's total production and consumption of these products and see what proportion of these total amounts were actually affected by prohibition before one can judge whether farm relief is a problem of liquor legislation or not. This is what has been done in the present chapter.

The principal cereals and materials used in the manufacture of alcoholic drinks will now be considered separately. The facts used are drawn entirely from official documents of the Department of Agri-

culture and the U. S. Bureau of Internal Revenue, and have been inspected by experts.[1]

WHEAT AND OATS (GRITS)

Wheat and oats (grits) are given a conspicuous place in the statistics of the materials going into beer and distilled spirits, and the figures look large. In 1914, the brewers alone used 116,619,510 pounds of grits. This may be converted to 2,082,491 bushels, to which may be added 10,582 bushels of wheat and 5,654 of oats reported as used that year in the manufacture of distilled spirits. If, however, we compare these amounts with the country's total production of these grains, averaging around that time about 700,000,000 bushels of wheat and about 1,150,000,000 bushels of oats, it is obvious that the production of alcoholic drinks consumed an insignificant fraction of 1 per cent of the country's total.

CORN

Corn is used both in the brewing of beer and in the making of distilled spirits. For the two years

[1] The principal sources used other than those cited include the following: For materials consumed by distilleries, Table 30 in a pamphlet *Statistics Concerning Intoxicating Liquors*, March, 1926, published by the Bureau of Internal Revenue, Washington, D. C.; for materials consumed by breweries, and for other facts for which no source is mentioned, copies of typewritten tables secured from the Bureau of Agricultural Economics, of the U. S. Department of Agriculture, Washington, D. C.; for figures of total production, the *Agriculture Year Books* of the U. S. Department of Agriculture, for the years named, and various issues of the periodical *Crops and Markets*, also published by the Department.

1915 and 1916, the amount used in both types of production was 68,747,896 bushels, as compared to a total of 5,511,720,000 bushels produced in the country in these two years. Some corn farmers around the Peoria district may have lost by the closing of distilleries in that district, but corn used by the manufacturers of distilled spirits, industrial alcohol, and beer averaged only slightly more than 1 per cent of the total national production, a proportion which is higher than similar estimates made by official publications.

RICE

Rice was used in considerable quantities in brewing, amounting for the two years 1915-1916 to almost 8 per cent of the total crop produced. The demand now coming from brewers and distillers is less than one-tenth of the former consumption, but the total amount of rice produced in the country is larger than before. The average amount produced in the country in the years 1921-1925 was 37,981,000 bushels, as against an average of 37,265,000 bushels for the period 1914-1920, which included the exceptional figure for 1920 of 52,066,000 bushels. If one compares the average production for the three years 1923-1925, of 33,642 bushels, with the average of 23,770,000 bushels in 1909-1913, prohibition does not seem to have had a devastating effect on the country's production of rice, much as individual producers may regret this interference with a portion of the market.

RYE

The average amount of rye used in the manufacture of distilled spirits for the three years 1914-1916 was 3,633,033 bushels, as against an average total production in the country for these years of 48,000,000 bushels, or about 7.5 per cent of the total production. A certain amount of rye was also consumed additionally in malt. It is not clear how much should be added for these items, but a rough guess may be made that up to 8 or 9 per cent of the country's production of rye was then consumed in the manufacture of drinks now forbidden.

This was, of course, a loss to the farmers. It does not, however, show in the country's totals. Production of rye in the years 1921-1925 averaged 68,169,000 bushels, as against 62,234,000 bushels for the years 1914-1920, and 36,093,000 bushels for the years 1909-1913.

The editor of an important farm journal who has read this chapter makes the following comment which is pertinent to our discussion:

> In a general way, it seems to me that the statement of the case is correct and sound, and I have no particular criticism to make on this.
>
> One minor point that perhaps you might want to cover is the fact that while the consumption of a farm product for a special purpose may be a very small percentage of the total production, in cases where production and consumption are closely balanced, a small change in the latter will cause a much greater relative change in the selling price of the production.

For example, a decrease of 9 per cent in the consumption of rye would be apt to cause a decrease of much more than 9 per cent in the per bushel selling price of the rye crop. This tends to increase the importance of the loss of markets due to prohibition. I do not think it affects the main thesis, but the point should be covered somewhere.

BARLEY AND MALT

The chief use of barley is as a foodstuff for livestock, but the better grades were demanded in large quantities in the manufacture of alcoholic drinks, chiefly in malt used by the brewers. In the three years 1915-1917 brewers and distillers used approximately 32 per cent of the average annual crop, as against only 3 per cent of the average annual production for the three years ending June 30, 1924.[2]

Due to a very much increased use of barley as feed, and also, to some extent, because exports of barley and malt have increased, the country's production in recent years has averaged larger than in pre-War years. As against an average production for the years 1909-1913 of 184,812,000 bushels, the average for the years 1921-1925 was 186,206,000 bushels. The year 1925, with a production of 218,002,000 bushels, compares favorably with the war year 1918, when 256,225,000 bushels, the peak figure

[2] The two chief sources used are *Foreign Crops and Markets*, for June 8, 1925, a weekly mimeographed bulletin of the U. S. Department of Agriculture, in which barley is featured in the issue named, and the Department's pamphlet "Grains," No. 907 (1924), p. 630.

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in the country's history, was recorded. But the gross figures do not tell the story.

The effects of prohibition on barley have been two. The chief one has been to reduce the demand for the better grade of barleys. In pre-prohibition days the brewers had paid a premium for the higher grades of barley, just as English, German, and French brewing interests pay a higher price for the best barley today. Since prohibition there has been a tendency to lump all barleys as being of the same grade, to the unquestioned detriment of the producers of the best grades. The other effect, according to some of the persons consulted, was that a good deal of land devoted to barley was turned into wheat land in 1920, and added to the overproduction in wheat that year, while some of the barley crop was thrown on the market as feed, reducing the market price of other feed grains.

While those who give the impression that barley production is at a fraction of its former quantity are exaggerating the situation, it is clear that the sections of the country making the special grades of barley required by the brewers, incurred appreciable losses through prohibition.

HOPS

According to an authority in the hop industry, the relative proportion of hops used in beer is about 1 part hops to 100 parts cereals. Hence, the hop acreage affected by American liquor restrictions is

almost negligible as compared with, let us say, the barley acreage similarly affected. According to *Foreign Crops and Markets* for February 25, 1925, published by the U. S. Department of Agriculture, the average domestic consumption of hops during 1910-1913 was 43,900,000 pounds annually, but was only 4,000,000 pounds in the year ending June 30, 1924—a drop to about 9 per cent of the average annual domestic consumption before the War. Exports, however, have increased as compared with the pre-War market. Hence the volume of total production in the country does not show as great a drop as might be expected.

In the pre-War period, the total annual production in the country averaged about 54,000,000 pounds; in recent years it has averaged about 25,000,000 pounds. The condition of American hop growers may be considered as having grown more precarious because they are almost entirely dependent upon foreign demand.

However, E. Clemens Horst, of California, one of the world's greatest hop growers, writes us that the hop growers have been prosperous during prohibition, and explains that this is due to the fact that the hop acreage had been greatly reduced before the Volstead Act by conditions incidental to the World War. He explains:

> The United States has, for the last 50 years, always grown many more hops than it consumed. About 20 to 30 per cent of the United States crop was annually ex-

ported, chiefly to England. The World War eventually resulted in England shutting out hop imports. This brought unmarketable hop surpluses in the United States and ruinous hop prices, causing a big reduction during 1916 to 1919 in the United States hop acreage. As a result of too great a reduction in hop acreage and of small hop crops in foreign countries, hop prices were raised in 1919, and reached about $1.10 per lb. Prohibition in the United States did not cause the high prices of hops in 1919 and 1920.

You may dry your tears for the "poor" hop grower, because he has been in the wine grape growers' class since 1919, as far as profits are concerned. About 16 cents per pound was a fair average price for hops over a term of years before prohibition, while since 1919 the general run of prices has averaged about 30 cents per pound. The amount of hop acreage has been increased every year since 1919.

GRAPES

If, however, the farming interests have lost in some fields because of prohibition, they have gained in others. The most striking example is the increase of grape consumption.

It is a notable fact that the grape industry, far from suffering during these few years of prohibition, has been breaking records for production and expansion. Statistics of car lot shipments for the country, as given in the *Agriculture Yearbooks* of the U. S. Department of Agriculture, show an increase of from 21,378 cars in 1917 to over 80,000 in 1925.[3]

[3] See also, U. S. Senate Committee, *Hearings, op cit.*, Vol. II, pp. 1451-1452.

There has also been an increase in grape sugar production from 152,056 pounds in 1921, to 527,910 pounds in 1923. The details of this increase are shown in Table XVII.

TABLE XVII. CAR-LOT SHIPMENTS OF GRAPES IN THE UNITED STATES, AND IN THE THREE CHIEF GRAPE PRODUCING STATES, DURING CROP MOVEMENT SEASON, JUNE 1 TO DECEMBER 31, 1917-1925

Year	Total Cars Shipped	Cars Originating in		
		California	New York	Michigan
1925*.....	80,421	75,021	3,413	366
1924.....	69,993	57,695	5,641	4,680
1923.....	65,336	55,348	4,312	4,202
1922.....	59,919	43,952	7,720	6,020
1921.....	37,817	33,344	2,535	1,292
1920.....	41,310	28,832	5,904	5,046
1919.....	30,349	21,605	3,751	3,783
1918.....	20,915	16,639	2,017	1,635
1917.....	21,379	13,251	3,621	3,298

* Figures for 1925 were preliminary estimates of the Department of Agriculture.

The chief beneficiary of the increased demand has been California. Instead of finding the grape market ruined when the Volstead Act was passed, as many in that state predicted, one of the complaints has been that the shipments had reached a point where the requirement for cars was becoming greater than the refrigerator car service of the Pacific Coast could handle.

Naturally, a good deal of significance is attached to the causes for this enormous increase. While an increase in consumption of grapes as fruit has been noted, and also increasing popularity among house-

wives in canning and preserving, the explanation put forward chiefly and in authoritative sources is a widespread practice of home wine-making.

It should be borne in mind that the one-half of one per cent standard which applies to beer is not as rigidly attached to wine brewed for personal consumption. The Supreme Court has not ruled upon homemade wine, but other courts have applied the wording of the law, which says that such products must be non-intoxicating in fact, to mean that the toxicity of the liquid is a matter for decision by a jury when a violation is brought to the court. Hence, homemade wine for personal consumption is, in a sense, not interfered with by the present administration of the law.

With increased demand have come higher prices and increased acreage devoted to grape growing. A correspondent who has investigated the subject in California and consulted some of the statistics available at the State Department of Agriculture which were not available to the present writer, states that the juice- or wine-grape acreage in California has increased from approximately 60,000 acres in 1919 to over 140,000 in 1926; table acreage from approximately 90,000 to 150,000, and raisin acreage from 175,000 to 340,000 acres. He claims, however, that the California grape grower is not generally favorable to prohibition and would desire a modification that would permit wines with heavy alcoholic content.

The reason most frequently heard, he states, is the

desire to find a way to turn the grapes into some legally marketable and storable product when there is overproduction of grapes or when a break in the market occurs, instead of leaving the grapes on the vines and incurring a loss. The grower also complains of a more unstable market, in which the fancy prices received for grapes are sometimes turned to naught by heavy speculative losses when prices recede. Nevertheless, there are persons who are more touching objects of sympathy than the California grape growers have been during these past few years.

INCREASED DEMAND FOR VARIOUS FARM PRODUCTS

It was shown in Chapter V that an indisputable result of the shutting off of beer was an increase in the production of milk, from 36,500,000,000 pounds in 1917, to 52,772,000,000 pounds in 1924, also an increase in ice cream. Of course, this was a boon to dairy farmers. An official in the Department of Agriculture called our attention also to the increased use of oranges and citrus fruits for beverage purposes, a fact which we believe but are unable to have verified by statistics. From another quarter, it has been suggested that the increased sale of corn starch and corn syrup may be due to home operations in the alcoholic field, but this is a small item from an agricultural standpoint. While the increased requirements of molasses because of the production of industrial alcohol are met chiefly by imports from Cuba, Porto Rico and Hawaii,

the statistics showing the growth of consumption are of interest, and are therefore given in Table XVIII.

TABLE XVIII. CONSUMPTION OF SUGAR AND SYRUP, AND OF MOLASSES IN THE MANUFACTURE OF BEER, NEAR-BEER AND DISTILLED SPIRITS IN THE UNITED STATES, 1914-1925

Year	Sugar and Syrup Used in Beer and Near-Beer (gallons)	Molasses, Used in the Production of Alcohol and Other Distilled Spirits (gallons)
1914	.....	64,721,265
1915	13,895,516	123,301,496
1916	9,609,682	80,977,474
1917	14,458,981	112,497,633
1918	8,086,116	118,027,960
1919	6,812,856	123,498,693
1920	2,919,259	113,132,685
1921	3,558,530	119,052,798
1922	2,553,171	97,222,854
1923	3,124,887	148,711,458
1924	2,368,199	155,001,162
1925	2,534,573	203,270,135

THE FARM RELIEF PROBLEM

The National Bureau of Economic Research has estimated that the total current income of farmers in the continental United States dropped from $9,589,000,000 in 1919, to $3,965,000,000 in 1921, a decline of 59 per cent. In certain states the decreases were more extreme than the country's total indicates. The estimates for Iowa show that the current agricultural income of the farmers dwindled to a pathetic figure in 1921, having declined from

$454,000,000 in 1919, to $37,000,000 in 1921, a reduction of 88 per cent.[4]

There is no question but that certain branches of farming and certain sections of the country are in a fix today. There are many branches and many regions, however, which are as prosperous today as ever. Does it appear that from a broad national viewpoint one can see any possibility of vital improvement in the prosperity of the farming industry as a whole through liquor legislation? The very fact that enormous excesses in certain crops occur six years after prohibition indicates that fundamental economic conditions, many of a world-wide character, and many obvious defects in production and marketing, are the basic problems. One cannot simplify this complex subject.

Reviewing the facts presented, it is seen that the crops affected by prohibition fall into three groups. In the first, the quantities used in the production of alcoholic drinks constituted so insignificant a part of the country's total production that a change in the law would not have any appreciable effect on the market. A second group, principally the producers of high grade barley and hops, suffered serious losses. A third group consists of farmers who seem to have gained, perhaps not because of prohibition, but certainly since it came into effect. We thus have gains from or since prohibition in certain sections and losses in others.

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[4] See the *News-Bulletin* of the National Bureau of Economic Research, for December 14, 1925.

From a national standpoint, modification of the liquor laws would help some barley farmers and provide a profitable market for hop growers, but would not be of general aid to the farming industry as a whole, and could not affect the farm relief issue in any important way.

In November, 1924, President Coolidge appointed an agricultural commission which included the chief executives of such organizations as the National Board of Farm Organizations, the American Farm Bureau Federation, the National Grange, and various experts in agricultural economics. Their report to the Sixty-Eighth Congress, submitted on January 28, 1925, on needed agricultural legislation,[5] makes some far-reaching recommendations, but leaves prohibition entirely out of the picture.

There are few having authoritative positions among the farmers who would include it. Among those consulted, the answer of Benjamin C. Marsh, Managing Director of the Farmers' National Council, is typical. He writes: "From the impressions which I have secured from talking at many farmers' meetings and with many farmers over the country during the last few years, I doubt if they see much connection between their deflation and prohibition, and I think they are correct."

Farmers themselves are, in the main, ardent prohibitionists and the backbone of strict enforcement of the Volstead Law. True as it may be that

[5] See the U. S. Department of Labor, *Monthly Labor Review*, March, 1925, pp. 26-30.

evangelical churches have more influence among them than among the sophisticated city dwellers, if prohibition were really as adverse to their economic circumstances as some allege, we suspect that there would be more of a division on the liquor issue.

There is, of course, another sidelight of strong prohibition sentiment in rural districts. The village saloons did not do enough trade in beer to enable them to keep fresh kegs of iced beer on hand, hence they sold principally whiskey. Thus the village bar was a trouble-maker. The farm hand who left the monotonous routine of the farm on a Saturday night and found its hospitable doors the only place open to him, spent all his money and did not show up for several days, or went back to the farmer's family in a condition which made him a nuisance or a peril.

CHAPTER XVII

HOTELS, CITY CONVENTIONS, AND REAL ESTATE VALUES SINCE PROHIBITION

FROM time to time statements are made concerning the ruin which prohibition has brought to the hotel industry, and the tremendous loss in money spent by people attending conventions in Canada. In particular, the plight of summer hotels, unable to compete with "tourist camps" in these days of universal ownership of flivvers, is asserted as due to prohibition. At the Senate hearings on prohibition, the late Hudson Maxim described their situation as follows:

"Under the blight of prohibition, the night winds whine and moan through the empty corridors of the summer hotels, and bats roost on the rafters, while their tottering frames are in a pitiable condition of dilapidation." [1]

THE HOTEL INDUSTRY UNDER PROHIBITION

Information about the experience of the hotel industry was secured by interviews with hotel managers and hotel experts, and by letters of information addressed to hotel executives, heads of hotel chains, and editors of hotel papers.

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[1] U. S. Senate Committee, *Hearings, op cit.*, Vol. I, p. 171.

From this survey it appears that prohibition had both good effects and bad. Its chief effect was to jolt the hotel industry from a laxness of method into an attitude of keen interest in efficient management. The loss of revenue put a premium on ingenuity in extending services to the community, and the better hotels and the better managements have successfully weathered this situation, with lasting benefit to the industry. Those types of hotels, however, which were uneconomic units, poorly located and poorly managed, existing chiefly because of the profitableness of the bars, have had a serious problem of readjustment. In this process, the disappearance of out-of-date hotels created a market for construction of modern structures designed to provide every possible comfort and service demanded by a more discriminating patronage. The vast amount of new hotel construction is an evidence that well-run hotels have been profitable and that the changes enforced by prohibition are not inimical to the prosperity of the hotel business today, troublesome as certain features of prohibition may be.

One of the frequent assertions made with regard to the hotel industry before prohibition was to point out that in many instances the smaller hotels, and not infrequently the larger ones, were little more than glorified saloons. The bar made such huge profits that the proprietor overlooked the losses in other departments. The restaurants were wastefully conducted, hotel rooms were operated on an uneconomic basis, and there was a prodigal waste of space.

The manager was often a saloon-keeper rather than a business executive.

E. M. Statler, president of the Statler chain of hotels, has declared that "the hotel man of the past was not a business man. He sold a few rooms, some food, and lots of 'booze'." He asserts that smaller hotels quite generally lost on their hotel operation but existed on their bars, and that, taken as a whole, hotels large and small made about 75 per cent of their profits from the sale of liquors, overlooking many possibilities of economies and profits in other aspects of their business.

Prohibition was a spur to hotel owners and managers everywhere, and is credited with having been the chief factor in stimulating a new hotel efficiency. As one authority puts it: "The movement toward more scientific methods that was well under way in 1919, was speeded up and pushed ahead many years by the peremptory demands that prohibition brought about at that time, stimulating thinking all through the industry."

The manager of the Philips Hotel, Philipsburg, Pa., writes:

> Prohibition started a new era in the hotel business. Formerly the restaurant food business did not pay. The large profits on the sale of drinks made up for all losses. Now that this revenue is gone, hotel men are forced to run each department so that it produces its share of the expenses and profit. It has taken the hit and miss out of the business and put it on a sound modern efficient business basis.

In order to make the restaurant pay, the manager uses a food cost accounting system, and thereby manages to sell each item at a certain profit. It has brought into the food business more standardization of production with a resulting greater efficiency. This change is the reason why restaurants no longer serve a large planked steak for a dollar, as they did in the old days.

An authority in the trade writes:

Prior to prohibition, accounting in hotels throughout the United States was given little attention. As a rule business was not departmentalized and, so long as a net profit was secured, little or no effort was made to determine the various sources of profit or loss.

Another calls attention to the feeling in many quarters, before prohibition, that a hotel manager was a sort of temperamental genius who did not have to be business-like and whose personality was not to be curbed by strict methods, but that today a manager is expected to be as capable an executive as in most other enterprises.

In seeking a way of making up the loss resulting from the cutting off of one source of revenue, hotels developed a source which in some few cases has been of almost equal revenue—sub-rentals. This factor had been largely overlooked in pre-prohibition days, but is one which has risen steadily in importance since. The general principle upon which new hotels allot space for sub-rentals is to try to get 15 per cent of the value of the site from this source, and in any event, not less than 10 per cent. The Hotel Roose-

velt, in New York, for example, gets $450,000 in sub-rentals, which is about 15 per cent of the value of the land. The owners of this hotel control the Mount Royal in Montreal, and it was stated that there is not as much profit from the liquor sold there as there is in the sub-rentals of the Roosevelt here, but, of course, the conditions are different in these two localities.

Flower shops, soda stores, tea rooms, candy and sweet shops, furnishing and gift shops are among the many attractive stores lining the big hotels today which years ago would not have considered using their fronts for store purposes. The McAlpin, the Astor, the Biltmore, and other large hotels in New York are examples of hotels which have made such arrangements. One hotel manager in Cincinnati, another in Chicago, and a third in Washington assert that they now make more profit on their soda fountains and tea rooms alone than they did on their bars—three instances which are, in all probability, exceptional.

The more general experience reported is that the revenue lost has not been made up from this one source, but from the many changes and improvements in management made when the liquor profits disappeared. Some hotels brought in orchestras and dancing, stipulating a cover charge that helped to make up the loss of revenue. Prohibition also helped to solve a problem of space for hotels which required coffee shops and cafeterias, since many hotels built a decade or more ago had not provided

for such facilities demanded by patrons under present conditions.

Some hotels raised the prices of their rooms considerably, aided by the shortage of hotel accommodations during the War, and by post-War prosperity. In part the amount of increase was due to the fact that in pre-prohibition days room rents in some hotels were not paying their way, being subsidized by the profits from the bar. In the case of the Copley Plaza, in Boston, the increase of room rates was cited as an important factor in balancing the loss of receipts from the bar.

THE CHANGED HOTEL ATMOSPHERE

A hotel manager who admits he himself likes liquor writes that in retrospect "the old hotel bar was an infernal nuisance." Others call attention to the many more embarrassing situations which the bar created. One, who makes sure to explain that he is not a "Dry," finds the situation much improved because "in pre-prohibition days disagreeable conditions arose in the bar continually by those who had overindulged. There is less sickness and we do not have the trouble in collecting our bills. A good deal of this was occasioned by guests spending their time in the barroom."

Hence, it must not be overlooked that the abolition of the bar was not entirely a factor to put on the debit side of the ledger, but also had elements for the credit side. Before prohibition there was in

many places a tradition that it was not within the keeping of propriety for women, especially young women, to patronize hotels, so that many families were kept from living at hotels by the prejudice of the woman of the house against the atmosphere of the bar and the lobby.

One authority asserts that prohibition has helped considerably to raise the proportion of women guests at hotels from 5 per cent before prohibition to about 25 per cent today. The prejudice has almost entirely disappeared with the passing of the bar, and hotels have also become the meeting place for groups of all kinds, from high school students to church groups. General L. Leslie Kincaid, president of the huge American Hotels Corporation chain, states: "Now that certain restrictions have been imposed through the enactment of prohibition, the hotel has become more than ever the logical center for all forms of wholesome civic and social activity." A hotel manager writes: "The best effect of prohibition is that it has raised the business of hotel management to as respectable a business as any there is."

That the hotel industry has adjusted itself to the new conditions and is a profitable one, is attested to by the verdict of that keenest group of investigators, financiers supplying capital for new hotel projects. The figures of the F. W. Dodge Corporation, the statistical authority in this field, are available for contracts awarded since 1920 in the 27 northeastern states, comprising about 75 per cent of the total volume of construction in the country. They show

that from less than 5,000,000 square feet of hotel floor space contracted for in 1920, the total mounted to almost 18,500,000 in 1925. One of the editors of a hotel paper states that the building program is particularly marked in the South, where prohibition existed before the Eighteenth Amendment.

It was inevitable that hotels poorly managed, poorly located, and operating with other uneconomic factors, which could not adjust themselves to the situation, would pass out of the picture. A good deal depended on the adaptability of its management. A large hotel in Troy, New York, is an example. It was profitable before prohibition because of its bar. When prohibition came, the manager, who was primarily a saloon-keeper, could not make it go. A chain hotel corporation took it over and made $100,000 profit in the first year. In other cases where the hotels went out of business, the old units have made place for newer hotels, supplied with every modern convenience. Over 80 per cent of the rooms in new hotels—one authority claims 90 per cent—have private bath attached.

HOTELS' PROBLEM OF LAW ENFORCEMENT

If hotels have, on the whole, overcome the problem of balancing the loss of revenue from the bar, they have not been as successful in solving other problems created by prohibition. Hotel owners have a common grievance against the unscrupulous competitor who evades the law and tempts away some

of the restaurant business of the hotel. On the other hand, though not admitted by hotel managers, it is an observed fact that many establishments wink at violations of the law by their waiters and bell-boys. Those that try to eliminate liquor have difficulty in stamping out bootlegging by their employees within the hotel itself. What is resented by managers particularly is the bringing of liquor by outsiders at public banquets—which is quite frequent—since they feel that if this is to be permitted, it should be legal and the profit should be theirs.

A general complaint is that patrons who bring their own liquor with them to their rooms do damage to the furniture in opening bottles or by spilling liquids on the carpets, or when intoxicated. While drinking in rooms also existed before prohibition, it seems that considerably more of a loss is sustained on this score in the rooms than before. The managing director of the Copley Plaza, in Boston, supplies the highest estimate on this score, with his statement that "as near as I have been able to figure out, our maintenance costs on carpets and furniture alone have increased 25 per cent since prohibition, due to damage caused by liquor."

EFFECT ON SUMMER HOTELS

The effect of prohibition on summer hotels can be considered briefly in the light of what has already been discussed about hotels generally. Some of the statements, made by those desiring a change in the prohibition law, about the plight of the sum-

mer hotels, are exaggerations, for many are, of course, profitable. Among such cases, Denver, Colo., for example, has 307 hotels today as against 202 in 1915. The statements also overlook most important factors. The alleged troubles of summer hotels are found alike in localities formerly "dry" and those formerly "wet"; and these difficulties are due mainly to the fact that so many more guests now tour in automobiles.

One who qualifies as a hotel expert explains that "summer resorts have lost out since prohibition; however, the prime cause is the automobile and not prohibition. People take trips in cars more now than ever, and there is less reason for staying long periods at resorts." He also states that city hotels have suffered because of the automobile traffic. A sign posted along the road by a farmhouse offering a clean room and bed for half-price, has lured many people away from the fashionable hostelry, because the extra two or three miles of travel are no deterrent to one driving his own car. Of course, if some of these hotels still had bars they could weather losses on the rest of their property. But hotels that cannot profitably offer their services in other ways may be classed as saloons, and the law was no kinder to them than to others depending for prosperity on the liquor industry.

CONVENTIONS LURED TO CANADA

The loss to American cities from conventions going to wet places across the border is denied by

convention bureaus and appears to be of practically no economic importance. The executive secretary of the Denver Tourist Bureau explains: "I have been connected with convention work continuously since 1906, and even during the wet days I never found the question of liquor had any definite effect upon the choice of the convention city." The secretary-manager of the Buffalo convention bureau states: "I have never run into any convention body where the liquor question was any inducement for them in the selection of a meeting place." The same statement is made by the St. Louis bureau, and was a frequent comment in the letters received from managers of convention bureaus in various cities throughout the country.

Convention cities are usually chosen for business reasons and to oblige memberships in certain localities, or for inherent ability to entertain apart from liquor. The fact that "wet" places are not such a lure, and "dry" places with attractions are not under a handicap, may be illustrated with many such facts as these: Buffalo, not far from the border, reports that it averages about the same number of conventions now as before, and San Francisco, in the far West, has increased the number of conventions to an average of 151 during 1923-1925, as against less than one-third that number in 1916-1918 and less than one-sixth during 1910-1914. That Montreal and Quebec have had an increasing number of conventions is nothing exceptional in city records. We have not been able to secure the data with regard

to these, but the convention bureaus of American cities do not seem in the slightest disturbed by the lure of Canadian cities.

The Convention Manager of the Montreal Tourist and Convention Bureau wrote us on June 16, 1927, that the availability of liquor has proved a handicap in some instances. He states:

> We recently sent out several thousand questionnaire cards to tourists who had written to this office for information. We got a very high percentage of replies and although we asked what influenced the tourist to come to Montreal there were only three who made any reference to liquor.
>
> I think the same is approximately true of conventions. Unquestionably there are a few conventions which come to Montreal largely because of our liquor laws but with the vast majority this has little or no influence. In fact we have lost several conventions because the directors were afraid that the members of their associations would turn liberty into license to the detriment of their convention.

In this discussion it should not be forgotten that in the past few years greatly intensified efforts have been made by American cities to bring more conventions to them, thus reducing the field for all. The replies received from the local associations are usually one or the other of two types: either they have had an increase of conventions, as is reported in New York, Chicago, Niagara Falls, Detroit, and elsewhere, or they ascribe the difficulty to the

greater competition among cities to get conventions and do not hold prohibition responsible.

As the Director of the St. Louis Convention Bureau states: "The item that will tend to make for a decrease in the number of conventions in any one city would not be prohibition, but would be the competition that now exists among cities going after conventions. Nine or ten years ago there were five or six cities which had organized bureaus working to secure conventions for their respective cities. There are now more than forty cities in the United States which have organized similar bureaus and are working to secure conventions for their respective cities, and there are any number of chamber of commerce secretaries in smaller cities who, having realized the value of conventions to a city, are now anxious to secure a maximum number of meetings for their own city."

On the other hand, it is undoubtedly true that those who are sufficiently wedded to alcoholic beverages to travel to Canada and elsewhere for it are spending some money there which would otherwise be spent here. Senator William Cabell Bruce testified at the Senate hearings:

> It is believed by Gilson Gardner, the well-known newspaper writer, who has made a special study of Canadian liquor conditions, that of the total annual gross receipts of the Quebec Liquor Commission, 40 per cent, or the sum of $16,000,000, comes out of the purses of American visitors. It is thought that as many as 200,000 American tourists visit Montreal and Quebec each season, and that

a large, if not the greater, part of these migrants are drawn away from the United States by the liberal liquor laws of Canada. .Compute also what they spend in Canada on other things than liquor and the magnitude of our pecuniary loss can be at least measurably calculated.[2]

REAL ESTATE VALUES AND PROHIBITION

One of the arguments made against ratification of the Eighteenth Amendment, when this issue was fought out in the states, was the tremendous slump in real estate values which would at once follow, creating a serious problem of municipal and state taxation. An executive of the New York Real Estate Board pictured 10,000 idle stores in the metropolis and a loss of $10,000,000 or more in rentals. The charge has not been made as frequently and with such confidence in recent years, but it has cropped up from time to time. Just what is in it?

The question as to just how prohibition has affected real estate values is a difficult one to answer. Of course, official government figures of the value of real estate show a big increase, the assessed valuation of real property in cities of the United States having risen from 27 billion dollars in 1915, to over 51½ billion dollars in 1925;[3] but a great many factors explain that increase. What we have done, therefore, is to communicate with those having a

[2] U. S. Senate Committee, *Hearings, op. cit.*, p. 19.
[3] U. S. Census, *Financial Statistics of Cities Having a Population of Over 30,000, 1915,* (Washington, Government Printing Office, 1916), p. 318. *Ibid.*, 1925, p. 454.

COLUMBIA COLLEGE LIB

direct interest in real estate values, who have observed the effect of prohibition, such as real estate boards, real estate men, and the mayors of small towns, and have taken account of surveys and studies already available on the subject.

It appears from this that saloons were assets to one type of real estate and liabilities to others. Had there existed a period of depression in the prohibition period, saloon property as a whole would have suffered losses. But the unprecedented prosperity greatly enhanced the value of real estate in general, and has, on the whole, created a demand that has served to overbalance the losses that might have occurred from the availability of so many saloon sites. In particular, the vacancies in saloon property located in strategic places in the business districts proved a boon to retail business. In the main, only the saloon which was located where no other service could be performed profitably except the dispensing of drink, has suffered a decline in values. Taking the situation as a whole, these past seven years have seen an adjustment of real estate values to the new situation which makes it appear unlikely that the abolition of the saloon has had any ill effect on real estate values as a whole.

The advantage of a saloon was the profitableness to the saloon-keeper; the disadvantages were the adverse effects on surrounding property. Saloons often occupied the choicest business locations, to the disadvantage of other retailers. They reduced the value of adjoining business property, and re-

stricted the kinds of uses to which the neighboring stores could be put, as there was a prejudice among women and among people generally against such locations.

When a saloon was part of a tenement, it often meant that the floors immediately above had a low rental value and that the rest of the building had to choose from the limited number of tenants willing to occupy such premises. Hence, they were often dilapidated structures. It also meant that neighboring residential property was low in value.

Saloons were often low buildings, of a "taxpayer" type, which resisted new construction. Their going out of business enabled many desirable pieces of land to be improved with new large and modern buildings, giving a higher commercial value to the plot than the original saloon. Saloons were large stores, and when they gave up their leases, it was not infrequent for two, three, and even four stores to occupy the same space. The World League against Alcoholism has made several saloon surveys in the principal cities of New York State. Its 1924 survey for New York City showed that 2173 saloons which had gone out of business had made places for 3899 stores and concerns of other types; and its 1922 survey showed that where the saloons had been replaced by other stores, which was presumably the case in the better located sections, there had been marked appreciations in the assessed value of the properties.

A questionnaire which *The American City* maga-

zine sent out, in coöperation with the writer, to the mayors of cities in towns of from 10,000 to 50,000 population,[4] brings testimony from the majority that real estate values had increased enormously since prohibition; but the most interesting testimony is that showing the striking changes in localities formerly serving as saloon rows. Examples of these are given below.

Grant Holcomb, mayor of San Bernardino, Calif., states that "real estate values have been directly increased by the abolition of the saloons, this having occurred not only on streets where saloons existed, but also a marked increase in all real estate values." Horace A. Sheldon, mayor of Port Jervis, N. Y., asserts that "saloons were a detriment to nearby property. Their abolition has caused an increase in real estate on streets formerly having saloons"; and John C. Tracy, mayor of Willimantic, Conn., writing in a similar vein, states: "The abolition of the saloon has had a decided effect on the increase in real estate values on streets formerly having saloons. These streets are now occupied by legitimate business, creating a much finer appearance to the street."

Similar testimony has come from employers, one of whom, connected with the largest concern in Southbridge, Mass., writes: "In the first two years after the advent of prohibition, a period when it was taken seriously, and reasonably enforced here, a community improvement was marked. A whole

[4] Published in its issue of April, 1927, pp. 459-465.

street devoted to saloons was rebuilt with attractive modern stores; merchants experienced increases in trade and better payment of accounts."

Some real estate men see many other improvements in the present situation which they attribute to prohibition. They recall the days when because of the existence of a saloon on every corner it was a problem as to whether they would encounter a tearful wife appealing for help or actually get the rent. They say that the tenement dweller or the occupier of the poorer properties has become a better tenant because the rent is not so frequently squandered in the saloon, and that tenements have become better stabilized as an investment.

What was probably a unique feature of saloon locations is that the range of property covered included the costliest corner in the heart of the business district and the dreariest outpost near the garbage disposal plant. In some sections, saloons were massed together or strung one after another along a street near a factory where workmen would stop for nothing else but a drink.

Thus saloons were often located in outlying sections where no other type of store could profitably exist; and when the saloons disappeared, the store, the frame building with it and the plot of land greatly depreciated in value. As an example, the Minneapolis Brewing Company writes: "We have twenty-five vacant stores on our hands which could be rented for a song, if someone wanted them." Such property is, in many cases, likely to prove a permanent

loss, for no one else is likely to want it. It presents interesting problems in real estate economics.

In the case of saloon property of the better type, located in a strategic point of a residential or commercial district, there might have been some loss in real estate values if business depression had prevailed. But the curtailment of building during the War, the boom period in 1919 and the first half of 1920, and the unprecedented prosperity of retail trade during these past few years, have put a premium on locations, and boosted the value of real estate to a point which frequently made up the loss of saloon patronage. Owners of real estate were often able to dispose of saloon leases at a premium to chain stores, drug stores, furnishing stores, branch banks, and other enterprises; while in many other cases vacated saloons renting at lower prices during 1921 and 1922 have mounted to far above their former rental today. Some brewers owning such property have the better been able to withstand losses on their breweries because of the increased rentals from their saloon properties.

Robert D. Warman, Mayor of Uniontown, Pa., much impressed with the effects of prohibition, writes in part as follows:

> All of our hotels used to be on Main Street, as well as the larger store and business places, yet the price of land was about $1,000 per front foot and very little of it could be sold for that much. Since the Eighteenth Amendment the price has gone up to $5,000 a front foot and is hard to buy even at that price. The old bar-

rooms and basement of the Exchange Hotel were rented by John Reagan, the owner, to the Kresge Company, for $1,500 per month for 40 years, or $720,000.

Were saloons to be permitted by law again, and be as popular as they were, it would probably mean that some of the people trading elsewhere would spend their money in the saloons. If dilapidated saloon property should acquire a new value, stores used by speak-easies and hop dispensers would be less in demand. Trades now getting some of the money that formerly went to saloons would, in some instances, curtail their growth. If prohibition were repealed, we might thus see a shifting of real estate values from some locations to others, but no benefit to real estate as a whole.

CHAPTER XVIII

BREWERIES, BREWERY WORKERS, BOTTLE MAKERS, BARTENDERS, AND DISTILLERIES SINCE PROHIBITION

WHILE acts of legislation are continually affecting the prosperity of one industry or another, no law passed in this country since the abolition of slavery affected so vast an investment of tangible property as did the Volstead Act. The U. S. Census of Manufactures credited the breweries with a capital investment of $792,914,000 in 1914. The Bureau of Internal Revenue listed 1392 breweries that year. By 1918 the number was reduced to 1092, and the final blows were delivered by wartime prohibition and the Volstead Act. Until the War the brewery industry had been an enormously profitable one.

It is of considerable economic interest to know what has happened to this huge aggregation of plants after seven years of adjustment, for the reports of the first two or three years were hardly adequate. It is also of importance to see how prohibition has affected the workers engaged in the beer business. The information was obtained directly from some plants and from questionnaires addressed to the country's largest brewers. The chief locals of the

various unions of brewery workers, bottle makers, and bartenders were written to or visited.

We should like to be able to report the good news that through some miracle the huge plant and equipment was all profitably converted to other uses, and the workmen all taken care of by other industries. This is not the case, and the assertions in some "dry" statements on this are far from the mark. Prohibition has had the not unexpected result of reducing many of the breweries to junk, and made it difficult for many of the workers to adjust themselves to other occupations.

The favorable side of the picture is the success of the more capable and fortunate minority, and also the fact that a good deal of the property made available through the closing of saloons was secured at a bargain by other industries, serving as a subsidy to many concerns requiring industrial property cheap.

PECULIARITIES OF BREWERY PROPERTY

Certain inherent characteristics of brewery property made it apparent even before prohibition that the chances of profitable conversion to other purposes was not to be the experience of most of the plants. Few people outside the industry itself realize how peculiar the construction of brewery plants is. Tall buildings, with huge storage cellars of impenetrable walls, containing high vaulted chambers to accommodate enormous sized tanks but having small windows so as to keep out light; un-

even floors of cement; specialized equipment almost useless for other purposes; often a location inconvenient for other businesses—all these factors made it inevitable that adaptation to other lines would be a serious problem.

The perplexities of some of the brewers may be illustrated by the exasperated reply of the president of the Bergner and Engel Brewing Company, of Philadelphia, that "the conversion of a brewery to other uses is a joke. It is more costly to convert and alter for other purposes than it is to take a vacant lot and build a new plant suitable for the purpose desired."

Theodore Hamm, president of the Theodore Hamm Brewing Company, St. Paul, Minn., is even more emphatic in stating:

> It has been absolutely demonstrated by all large brewing plants in the country, and we consider ourselves in that class, as we were before the war, that the brewing industry lends itself to no other industrial activity in an acceptable form, and the proposition of converting brewing plants into successful industries other than the brewing of beer, has proven a costly mistake to all large manufacturers. We have added other types of beverages —ginger ale, cider and sweet drinks. We are manufacturing ice, industrial alcohol, and malt syrup. We have operated our plant with all these auxiliaries since prohibition, most of the time in red ink. Probably all of these efforts utilize about thirty-three per cent of the plant. We are at present just practically getting by—no return on investment representing plant and equip-

ment and property connecting with it of $4,000,000.00. This is a fair picture of the position of every large brewer in the United States.

Mr. R. L. Darley, secretary of the Stegmaier Brewing Company, Wilkes-Barre, Pa., writes:

As the plant of a brewery is specially built for the particular purpose with various floor levels, ceiling heights and partition, many of which are insulated, and as the machinery and equipment are likewise mostly built for the particular purpose, the general effect of prohibition on the industry was to leave a "junk pile" in the hands of the owners, so discouraging in most instances as to close the plant entirely.

The limitations experienced by owners of brewery property who have endeavored to convert their plants to other profitable uses may be illustrated by the experience of the Pittsburgh Brewing Company. Its treasurer replied:

We had in operation in 1919 fourteen plants, of which at the present time one, the largest, is used for the manufacture of near-beer, soft drinks, and ice; one was converted into an ice cream manufacturing plant; one into a cold storage plant; one into a dry storage plant; three were sold at a considerable sacrifice, and seven are standing idle. . . . Approximately twenty-five per cent of our plants and equipment have been salvaged as a result of these efforts.

The possibility of converting brewery property was the subject of investigations even before prohibition by the War Industries Board, the Department

of Agriculture, the U. S. Chamber of Commerce, and by engineers. Many of the ideas developed proved successful; others did not. A good deal depended upon the intelligence and ability of the brewers themselves. And since many of them were lacking in adaptability, or had too many unfavorable circumstances against them, it was inevitable for them to suffer a considerable loss. The chief uses to which brewery property has been put will now be considered.

MANUFACTURE OF NEAR-BEER, SOFT DRINKS, CONFECTIONERY, AND ICE CREAM

In an earlier chapter it was shown that the present production of near-beer is only about 7 per cent of the production of real beer in 1914, and that the increased amount of soft drinks produced accounts for only a small part of the difference. It is not possible to concentrate the making of near-beer in a small part of the plant, so that in many instances the breweries engaged 25 to 50 per cent of their space, and more, to produce near-beer equivalent to 10 or 15 per cent of their former output. Those firms are best off which have developed a volume comparable to what they produced before, but these are few. Others have salvaged their plants by developing a satisfactory business in soft drinks.

With war-time prohibition, there was a veritable scramble on the part of the brewers to enter into the manufacture of soft drinks, luxury foods, such

as ice cream and candy, cheese, yeast, syrups and dairy products, and similar items. While some of these have found one or more of these profitable, others lost a great deal of money because they entered these fields without thoroughly studying the market. When it is considered that a large number of breweries and others were playing the same hunches, the resulting competition made it the more likely that few of the newer concerns would find their ventures as satisfactory as they had hoped.

In 1921, the *Beverage Journal* carried the results of a survey which showed that 667 former breweries were manufacturing non-intoxicating beverages, of which 431 made beverages other than near-beer. In view of the fact that the second half of 1920 and the succeeding two years were periods of depression and grave unemployment, the new lines helped to eliminate some of the breweries the sooner. One large company which put on a campaign costing several millions lost a great deal of money in getting itself into the trade.

Anheuser-Busch has been notably successful in ice cream production. In the Company's branches, located in New York, New Orleans, and Oklahoma City, a million gallons a year are made. Some breweries are manufacturing cider, syrups and other fruit juices; other breweries are condensing milk, making edible vegetable oils, egg powder, commercial foodstuffs, and have taken up a variety of other dairy and general food products. The Pabst Brewing Company of Milwaukee makes cheese and has

parcelled itself out to a dozen uses, ranging from a tire plant to a garage.

Breweries have been put to almost every imaginable use. A. G. Hupfel, operating a large brewery in New York City, after considerable experimentation, converted one of the cellars into a mushroom patch and sold it. He developed ways of reproducing climatic conditions necessary to their growth, including fog, dew and even thunderstorms, having found that electrical action tends to stimulate growth!

ICE-MAKING AND COLD STORAGE

One of the uses to which a brewery was most favorably adapted was the manufacture of ice, due to the fact that brewers always had to manufacture a certain amount for their own use. When the expansion of the ice-making equipment was justified by local conditions and the steady growth of population, the breweries found this profitable. In other instances they entered a field where there already was a condition approximating overproduction of ice, so that they lost money in their new venture, or made conditions worse for the existing ice establishments. The refrigeration facilities have, however, been an undoubted asset, for upwards of 150 breweries, and perhaps 200, are said to have entered this field.

Another use to which brewery property seemed eminently fitted was conversion into cold storage plants. In at least forty instances, an outlet was

found for part or all of a brewery plant in this way, and a satisfactory business built up. But in others difficulties were encountered, because some products sent to cold storage plants must be kept at temperatures lower than that for which breweries were equipped or insulated. Those who did not wish to engage in reconstruction of their plants limited themselves to the rougher classes of goods, or became general warehouses.

A good deal has depended on conditions in the vicinity and on the part of the city in which the brewery was located. If the vicinity was already well supplied with cold storage facilities, the expense of remodeling might be an additional loss. As an instance of this difficulty, the secretary of the Liebmann Breweries, Inc., of Brooklyn, N. Y., reports: "Some of our idle buildings were built for cold storage. One of them, eight stories high, occupies a plot 100 feet by 100 feet and is built as strong as a fort. We thought this building would surely be used for other cold storage purposes, but notwithstanding that we have been willing to sell it at less than one-eighth of the reproductive value, it is still idle on our hands."

THE PLIGHT OF SOME BREWERS

Under the circumstances depicted, it is understandable why a large number of brewers would have hesitated to incur the expense of entering new lines, or preferred to quit the game entirely. Even in

this latter phase, they could not retire very gracefully because of the extreme difficulty of getting any kind of satisfactory price for the peculiarly constructed brewery property. Quite a few brewers preferred to get out early and take advantage of being in the lead. They took out their saleable equipment and shipped it where it could be disposed of—in some cases even to China. Others waited, and were caught between the millstones of a tremendous overexpansion of plant facilities remaining in many War industries during 1917-1919, and the excess of space released by the depression beginning in the fall of 1920. Almost any brewery which sold its plant since the middle of 1920 lost severely by the transaction as compared to the value ascribed to the property when used for brewing purposes.

One St. Louis firm states: "This company controlled seven brewery and malting plants when prohibition became effective, of which one has been sold and a second partially rented, while a third is being utilized in part in the production of soft drinks. The other four plants are idle and we are endeavoring to sell them. If we can salvage 10 per cent of the physical value as carried on our books in 1919, we will feel satisfied." That this estimate is not too pessimistic can be instanced by the letter of a Milwaukee brewery which reports: "Since the adoption of the Eighteenth Amendment we have made efforts to dispose of our brewery and bottling plant, representing an original investment in the neighborhood of $2,500,000. The best offer we have

been able to get up to the present time is $275,000, which is about 11 per cent of its original cost, and seems absurdly low."

The depreciation of unused brewery property is serious. In one case a brewery costing approximately $7,000,000 was sold at less than $600,000 in 1923, after only three years of disuse. Twenty-five per cent has been considered a high sale price, and such a proportion was obtained when the location gave the plot a high ground value. In general, the longer the owner held out, the less he got.

OTHER INDUSTRIES SECURE AVAILABLE PROPERTY

It is obvious that under these conditions many of these properties have been available for sale at bargain rates to industries which could use them, and that is what has occurred. The *Anti-Saloon League Year Book* for 1921 contains a survey of this question which runs on for several pages of citations as to the wide range of uses to which former brewery property has been put, including instances of conversion to churches and hospitals. The U. S. Chamber of Commerce, in a memorandum to the writer, lists breweries turned into foundries and machine shops, tin can factories, as well as uses already mentioned. The new enterprises are often carried on by new owners, rather than by the original brewing organization. The availability of cheap industrial property was a boon to a great many other enterprises trying to establish themselves or to expand in

other fields, and much of the former brewery property is doing good service.

It may well be asked, however, why it is that in spite of depreciation and maintenance costs, some brewers are still holding on to their property. Possibly some simply cannot get their plants off their hands, and others are reluctant to let their property go for a song; but correspondence and discussion with brewers establish the fact that many still hope for a change in the law.

THE EXTRAORDINARY CASE OF ANHEUSER-BUSCH

The problem of adaptation to the new conditions and of converting brewery property into other uses presented itself in its most magnified aspect to the Anheuser-Busch Company of St. Louis, the largest lager beer brewery in the world, with a plant which in St. Louis alone approximated 142 acres, and an investment in tangible assets throughout the country valued in excess of $50,000,000. The Company writes: "At that time, the sun never set on the products of our great St. Louis plant. A business authorized by and pursued strictly according to law, enjoyed an international market, and 30 per cent of the inbound and outbound freight moving through the railroad terminals of St. Louis moved to and from our brewery."

The earlier troubles of this Company upon the coming of prohibition may be indicated by the striking facts presented in the following statement:

When this business was declared to be unlawful, we found ourselves possessed of buildings and machinery not well adapted to other lines, and an organization highly skilled in brewing, fermenting, and bottling. Naturally we availed ourselves of the right to produce, bottle, and sell beverages, especially cereal beverages. But our Government would not permit the manufacture of a cereal beverage by any method which at any stage of the process developed as much as one-half of one percent of alcohol, even though the excess were removed before leaving the brewery.

Thereupon we developed the so-called arrested fermentation process, and called the beverage "Bevo." It was not (and we knew it would not be) so good as a beer of ordinary alcoholic strength, fully aged, and then dealcoholized. But the government regulations prevented the employment of the latter method. The public, unable to get anything better, eagerly accepted Bevo.

We had approximately $15,000,000.00 invested in it, as a new enterprise. Without notice, the Government suddenly changed its regulations so as to permit brewers to make first a real beer of normal alcoholic strength and fully aged, and then dealcoholize it, account for, or waste, the alcohol, and sell the dealcoholized product as a cereal beverage. We knew this product would be far superior, and that the public would turn to it at once in preference to the beverage made by the so-called arrested fermentation process. We at once changed to the newly permitted process, and many breweries started up again and supplied competition which they had been unable to furnish before, because they did not understand, or were not equipped for, the arrested fermentation method.

Of course, our $15,000,000.00 investment in the Bevo

business (born and developed under government regulations) was killed over night by the Government's radical departure from those regulations. Quite apart from the time and money required in effecting the change in our plant, it takes at least four months to make and properly age a good beer. We were ready as soon as money, skill, and the processes of nature permitted, but next to the declaration of prohibition, this sudden change of policy respecting the method of making cereal beverage (near-beer) was to us the greatest financial blow ever dealt by the Government to industry.

August A. Busch has stated that it would have cost the company about $3000 a day to open the front door of the plant even if it did not do a stroke of work. The success of Anheuser-Busch makes a fascinating story, marking one of the epoch-making achievements of versatile management.

There were, however, several advantages which Anheuser-Busch possessed over the great mass of the brewers, and these may well be considered at the start, because without them some of the things which the firm accomplished could not have been done. It was a highly diversified organization, integrating among its plants and business interests coal mines, glass manufacturing units, railroads, manufacturing rights for Diesel engines (of which many were built for the country during the War), a woodworking shop, a plant for manufacturing wagons, and an extensive business in feeds for poultry and live stock. Hence, the firm had acquired experience in a great many lines.

Another advantage was complete flexibility in financial control, since, in addition to the fact that every dollar of capitalization was still owned by the Anheuser and Busch families, closely related by marriage, there was also the enormous financial strength in personal fortunes and considerable credit at the banks.

Using as their central idea the basic fact that primarily the firm was designed to *convert grain* into other products, several other new lines were projected, each in some measure germane to this basic activity. A malt extract to lighten, enlarge, and sweeten bread was made from the barley that formerly went into beer; it is now sold in large quantities to bakers. A liquid food tonic having a malt basis sold widely by druggists, and yeast, recently added, give promise of large volume in the not too distant future. A variety of corn products, such as starch, glucose, syrup, and foods for live stock and poultry, were developed from the retrieved waste of barley, corn, and rice.

Because of its huge output, requiring in earlier days a large number of wagons in its central plant and the numerous branches throughout the country, the Anheuser-Busch Company had for years conducted its own plant in St. Louis for manufacturing these wagons. Hence, states Mr. Busch, "It was natural and not very hard to change from wagons to truck bodies." The company specializes on bodies for motor busses and for trucks used in the delivery of ice and perishable food products requiring refrig-

eration in transit, and this is a distinctly profitable department and growing rapidly. A cabinet was also developed for refrigerating ice cream in bulk, by what is called a new principle, which has filled such a need that the producing capacity of the woodworking department has been taxed to the limit and sometimes has been oversold.

The complexities of converting the plant in St. Louis are multiplied when it is considered that the Company had a large number of branch properties throughout the country. Beer was never made at any of these. They were places for receiving carload lots of beer, keeping it cooled by refrigeration, supplying customers by wagon and truck, and distributing beer and ice.

The Company controlled, or owned outright, many ice plants scattered along the principal railroads. Some of these had cold storage facilities. Some had sufficient capacity to re-ice in transit or to store perishable goods for shippers other than themselves. A few of the branches have been sold; others continue as ice and cold storage plants; and in some, as mentioned previously, the Company has engaged extensively in the business of making and delivering ice cream.

Not all the equipment and space made vacant have been put to use, although the Company spent $18,000,000 to make the various alterations and establish the new lines. Therefore, its facilities have been leased to other companies for use for storage, light manufacturing, and similar purposes.

Some of the buildings in St. Louis have been rented to independent industries, whose proprietors acquire their power from its vast plant. Other parts of the St. Louis buildings have been converted into a corn products factory, where the Company produces high grade glucose for the confectionery, baking, and canning trades, and in that unit, as well as in the malt and brewing plants, standard animal feeds are made.

During the first three years heavy losses were sustained, and only during the fourth did the extra volume of business meet the cost. In 1924, the firm turned the corner and began to make profits. These have since been substantial and have allowed it to resume dividends. August A. Busch is even hopeful that by 1936, perhaps before, the former volume of business will not only be reached, but exceeded!

Nevertheless, the assumption that similar success has been attainable for all breweries is a sanguine hope unjustified by the practical conditions. As George W. Eads, of the Anheuser-Busch Company, himself explains:

> You should not get the impression, however, that the measure of success that has been attained by Anheuser-Busch in the operation of its plants could have been duplicated by the former brewing industry as a whole, or by many units of that industry. We are surrounded here in St. Louis with former brewing plants that have been idle since the adopition of prohibition. When the prohibition law became effective there were thirty brewing plants in St. Louis. Outside of the Anheuser-Busch

properties, only four small units of the other plants are in operation, and they are losing money all the time. I think it a fair estimate that the value of the brewing property in St. Louis at the beginning of prohibition was $200,000,000. At least $150,000,000 of that property is practically idle today, with no prospect, whatsoever, that I can see of its being usefully employed. While Anheuser-Busch appears to have met the situation to an extent that it is again on a dividend paying basis, at least nine-tenths of the brewing property of the United States is either idle or losing money.

THE SKILLED BREWERY WORKER UNDER PROHIBITION

Like other industrial upheavals, prohibition has made some workers, who in their youth had entered what was regarded as a lifetime occupation, bear the brunt of the change. There were many kinds of employees in a brewery, such as office workers, teamsters, day laborers, and mechanics, who were affected by prohibition, but in ways no different from that resulting whenever a discharge occurs for lack of work. To the skilled brewers, however, who had been apprenticed in this work and who had never been in any other trade, prohibition was a real blow.

The reduced need for skilled brewers may be seen in the sharp decline of the union membership from about 62,000 in 1917 to less than 18,000 in 1926. These reductions began in 1918. Many of the men were out of employment for months, some for years. Many who have found jobs obtain salaries very much lower than they had been used to getting as expert

brewers. While there were numerous instances of successful readjustment, and some are better off because of the change, there is no question that the older and less adaptable types have suffered a good deal. Those who were induced by bootleggers to assist in underground breweries manufacturing in violation of the law are, in the main, the only ones who have profited financially by prohibition.

THE BARTENDING PROFESSION SINCE PROHIBITION

To hear a talkative union business agent speak of the bartending art, the decadence of bartending in this country is the loss of a profession. A bartender in a low saloon might have been little more than a "roughneck," but one in a fashionable district or an exclusive club was a "mixologist" who had to know all the varieties and brands of liquors, and all the combinations that a self-indulgent trade required. He had to be an affable yet respectful conversationalist, a tactful salesman, and possess a sound knowledge of human nature, aside from the obvious fact that in too many instances he had to be a man of courage and not too awkward with a broomhandle or a gun, as the situation demanded. What has happened to the men of this outstanding occupation?

There is no question that those who dispense soft drinks at dance halls, entertainments, and similar places are only a fraction of the number formerly following the trade. The more adaptable men have

gone into other trades. The less scrupulous of the skilled group are working in speak-easies. Others are waiters.

Interesting experiences of attempts to find places for the men are reported by union agents to whom letters were addressed. The manager of a large New York local states that when prohibition came, he tried to get some of the bartenders who were thrown out of jobs to take positions in soda fountains. He made a dicker with Liggett's drug stores and promised to supply them with the best men and those who had been in the most exclusive clubs.

On the whole, this proved a failure. The men who had been ten or fifteen years at fine bars could not adjust themselves to the kind of trade the soda fountains had. The one thing that all complained of most vociferously was having to deal "with fussy women who changed their minds four or five times." The tactfulness that might have been shown in dealing with financiers and sportsmen was not adequate in dealing with flappers. And the mixing of fountain drinks was a new process to them. Some of them took up hard labor of various types in preference to working at soda fountains, and many have made the change permanently.

Bartenders have separate locals, but are combined nationally with waiters and cooks in one hotel workers' and bartenders' union which, in 1916, had 59,000 members. By 1923 the number had dropped to 38,500 members, due chiefly to the dispersion of bartenders but also to some reduction in the number

of waiters. For the passing of Delmonico's, Churchill's, Reisenweber's, and similar places in New York, or Edelweiss Gardens, Bismark Gardens, the North American Restaurant, and others in Chicago, marked the decline of luxurious dining and reduced the need for the skilled waiters forming the backbone of the organized trade. Many more girls are used as waitresses than before, partly due to the fact that liquor is no longer served, but also because cafeterias, tea rooms, and chain restaurants proportionately occupy a larger place in the country's food service.

THE BOTTLE WORKERS

To attempt to trace the effects of prohibition on the various industries affected by prohibition would be a huge task. It would, in all probability, lead us to the conclusion that many industries depending for their business on the established demand from breweries and distilleries lost a good part of their market and had to make it up in other directions, and the workers were similarly diverted to other trades. We shall content ourselves with mention of one industry closely allied, that of bottle making.

Bottle blowing, one of the oldest of the skilled industries in America, was at one time a mouth and hand process. In 1907, the peak year, the Glass Bottle Blowers Association had a membership of about 11,000 journeymen and 2000 apprentices. This represents the high point, because a machine process had been perfected a few years before and

was rapidly displacing skilled workers. Only an enormous increase in beverage consumption might have enabled the occupation to hold its own. Prohibition, of course, brought the opposite result. The combination of increased use of machinery with prohibition having considerably reduced the amount of work, many firms left the business, and others suffered a reduction of output.

The secretary of the Blowers' Union states that the membership today is less than 6000, but he believes that the men who quit the trade have not fared badly. He states that the piecework system by which the blower was paid, trained him to be an exceptionally fast workman, and that as a result, he has not had much trouble in securing employment. The men have taken up all kinds of new activities, and are not reported to have had much difficulty in readjusting themselves to conditions.

THE WHISKEY AND BRANDY DISTILLERIES

In a previous chapter it was shown that in the past few years there has been a huge increase in the production of industrial alcohol in this country, so that the total production of distilled spirits in 1926 exceeded the figures for every pre-prohibition year except 1916 and 1917. It must not be thought, however, that this increase in the production of alcohol has been the means of giving profitable employment to the plants in the distilling industry.

There are several reasons why it has not. Whis-

key is made from corn, rye, and other grains. Brandy is made from fruit. Industrial alcohol is made the cheapest way, from molasses, and the plants are located at seaports or on navigable streams, accessible to ships from Porto Rico, Cuba, and Hawaii, from which molasses is obtained. But of the 880 distilleries in 1914, 475 were grain distilleries and 380 fruit distilleries, leaving only 25 engaged in molasses distilling.[1]

According to the U. S. Census of Manufactures, for 1914, the last taken before restrictions of a national character began to affect whiskey production, the distilling industry as a whole had an invested capital of $91,285,028, and employed 6,295 persons. A large proportion of the work of a distillery involved handling, bottling, storing, and shipping, so that the closing of a distillery meant in most instances the loss of one's job rather than of one's trade. The skilled distillery workers making whiskey and brandy represent no large number for the country as a whole, since machinery did most of the work. We have not looked into the matter of what has happened to those who had no other trade, because we doubt if accurate information can be secured about them. It was easier to get information about what happened to the plant and equipment of distilleries because these were so largely concentrated in a few localities.

[1] U. S. Bureau of Internal Revenue, *Statistics Concerning Intoxicating Liquors,* March, 1926 (Washington, 1926), Table 33.

A survey among the chief whiskey towns shows that the distilleries as a whole fared poorly, although individual concerns here and there met with more than average luck and others were able to dispose of their property to industrial concerns. The secretary of the Chamber of Commerce of Frankfort, Ky., replies for his town that "it is a very sad story. Of the fourteen original distilleries located here, eleven are out of business. The stills have been sold for junk and the buildings have either fallen down or burned down."

The secretary of the Chamber of Commerce of Bardstown, Ky., writes: "We had twenty-four distilling plants in Nelson County; some were considered large and others small. Practically all have dismantled and sold the equipment for junk. One or two were sold to distillers in Canada. The few that have not dismantled are standing idle. None of these plants is being used for any other purpose in an industrial way. The distilling plants here have practically been a complete loss to the owners except what they could junk them for."

On the other hand, of the seven large distilleries of Peoria, Ill., four were sold, though at a loss, to other industrial concerns and are now in use, while three others have found a place in the production, denaturization, and distribution of industrial alcohol.

Wherever the distilleries were not the main industry of a town, the availability of these properties helped other businesses and the change did not mean as much to the community. An instance is Louis-

ville, Ky. Statistics supplied by the secretary of the Louisville Board of Trade, indicate that while the distilling firms in that city did not fare well, this does not seem to have been a deterrent to the prosperity of the locality. According to the U. S. Census of Manufactures, which he cites, the value of products made in Louisville increased from $105,223,000 in 1914 to $266,231,770 in 1925, and the number of wage-earners from 25,930 in 1914, to 38,239 in 1925. The fifteen liquor distilleries existing in the city in 1914 had employed only 442 wage-earners.

Concerning the fate of the property involved, he states:

> Practically all of the buildings formerly used for distilling whiskey have been dismantled and the equipment and machinery sold for junk. Some of these buildings are now being used for soft drink bottling plants, fertilizer works, broom and mop factories, markets for second-hand automobiles, and vinegar manufacturing plants.
>
> A considerable part of the buildings owned by the distilling firms were occupied as warehouses for the ageing of whiskey. One half of the whiskey legally held in the United States is stored in Kentucky and a greater part of this is in Louisville. Abandoned warehouses have been wrecked and the brick used for construction of new buildings, during the active progress which has been in effect in this city in the past five years.

CHAPTER XIX

HAS PROHIBITION INCREASED AUTOMOBILE ACCIDENTS?

THE advocates of prohibition regarded the menace of liquor used by autoists as one of the important reasons for urging their cause. Hence, those opposed to the Eighteenth Amendment seem to have found considerable satisfaction in the upward trend of statistics relating to automobile accidents. The chief reasons for claiming that prohibition has increased such accidents are statistics showing that the number of licenses revoked for drunken driving has increased faster than the number of cars operated.

We shall consider this subject because automobile accidents, aside from their social consequences, have a pronounced economic significance. The fatalities, the personal injuries, and the destruction of property in traffic accidents have been estimated, in the report of the Second National Conference on Street and Highway Safety,[1] as representing an economic loss of about $600,000,000 annually, and it is asserted that in about 85 per cent of these accidents automobile traffic was involved.[2]

[1] Held by the Department of Commerce, March, 1926, Proceedings published by the Department of Commerce, Washington, D. C.

[2] "We have considered some rare and some common forms of mental illness with reference to the qualifications of the motor

CRUDE STATISTICS USED FOR PROPAGANDA

We have gone through a good deal of printed material on this subject, written letters of inquiry to official boards in many localities, and personally visited some of the motor vehicle bureaus and similar agencies. We find that the statistical material available as a guide is inadequate and exceedingly difficult to interpret. The excessive haste in certain quarters to use crude statistics in order to draw a

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vehicle operator, but all the damage for which all of them jointly are responsible is, in my opinion, relatively unimportant compared with that resulting from a single abnormal mental state which very few persons would feel like calling 'mental' at all. I refer to *alcoholism.* If one were to familiarize himself with the mental operations required for safe driving and set for himself the task of producing an experimental condition which, without inflicting any organic injury upon the brain, would affect precisely the functions most essential, he could hardly devise an adequate substitute for alcoholism. Safe driving depends most fundamentally upon the desire of the operator to live and a decent regard for the rights of others to do the same thing. In accomplishing this desire and expressing this regard he calls upon judgment, exercises self-control, and is actuated by normal feelings. The individual under the influence of alcohol has a specific impairment of judgment, the inhibitions that make self-control possible are removed, and he is in an abnormal state of feeling. The rights of others dwindle in importance as his own ego is inflated. Not only are important mental functions impaired, but the lower nervous centers that control coördinated activity of brain, eye, and muscle are also rendered ineffective. *From the point of view of the psychiatrist the alcoholic represents a greater hazard to motor traffic safety than any other mentally abnormal person.* It is not surprising, therefore, to find alcoholism occupying a very high position as a cause of motor vehicle accidents, and it is obvious that any recommendations based upon considerations that affect the mind of the operator would include the most careful efforts to confine permanently to more primitive means of transportation any persons who are subject to alcoholism." (Thomas W. Salmon, Professor of Psychiatry at Columbia University, in an article, "The Mind of the Operator," in *Proceedings of a Conference on Motor Vehicle Traffic,* April 9-11, 1924 [Yale University Press, 1924], pp. 57-8.)

moral is obvious propaganda. Crude statistics, without careful interpretation based on an understanding of the administrative and social background, are only part of the story. They are as meaningless as figures showing that every German worker was better off a few years ago because his weekly wages were in millions of marks.

The writer does not pretend to know positively just what the situation is, but at this point wishes to suggest that the disproportionate increase in the number of drunken drivers reported is in large part due to the fact that the public has at last become concerned about the situation, that agencies have been set up to discover the offenders, that greater severity is practiced in dealing with them, and better records are kept. But we cannot reduce this complex subject to a sentence.

The assertion that prohibition has caused an increase in the number of drunken drivers finds its chief proponent in a pamphlet prepared by the Moderation League, an organization desiring repeal of the Amendment and modification of the Volstead Act. In a survey made by the League's research director, Mr. Shirk, figures are zestfully given showing huge increases in the number of drunken drivers since the end of 1919, and the statement then made that this "leads to the confident belief that it is due to one general cause—the Volstead Act—with which it is coincident." [3]

[3] *A National Survey of Conditions under Prohibition, 1926* (New York, 1926), p. 9.

We confess to considerable irritation with the obvious sophistry of this pamphlet. It is crude propaganda given a statistical dressing. Without proper interpretation, figures alone are misleading. There is also room for a little more doubt in the world than the pamphlet contains. When Mr. Shirk presented his facts at a meeting of the American Statistical Association, in New York, he was criticized on all sides for the crudity of the data from which he derived his conclusions. Mr. Shirk, we understand, is a lawyer. What he has done with statistics is analogous to citing the statutes existing on a particular legal point as being the law, and disregarding the decisions of the courts on the meaning of those statutes.

Statistics of drunken drivers are meaningless, as are statistics of most subjects, without a presentation of the background and an honest effort to interpret them. Statistics alone show merely that certain figures go up or down, but there are so many reasons why numbers should change from year to year that an investigator owes it to the public to take up some of the important ones, or at least to acknowledge that they exist.

When we discussed some of the reasons for the changes in the figures for drunken drivers with authorities—and it does not appear that Mr. Shirk had taken that trouble—we found that the background of automobile accidents during the past few years was an indispensable basis of understanding those figures. It may seem that in the next few

pages we are digressing from the subject we started out to discuss, but it will soon be apparent that the changes we shall first consider explain a good deal about the figures for drunken drivers.

THE BACKGROUND: INCREASE IN AUTOMOBILE HAZARDS

The most important of these changes is the increased number of automobile accidents of all sorts occurring recently, arising inevitably out of modern traffic conditions and human frailties. The number of passenger cars and motor trucks registered in 1926 was 22,001,393, which is an almost 200 per cent increase over the 7,565,446 cars registered in 1919.[4] This fact of itself adds a complication in estimating the traffic hazard. Shall we assume that motor car accidents should normally increase only in proportion to the number of cars operated? A moment's thought, however, should make it clear to anyone that increasing the number of cars in a community from 20,000 to 40,000 will result in a greater traffic hazard than did the increase in that town, some years before, from 1000 to 2000 cars.

This is because the strain on the person driving becomes more severe, and the opportunities for collision more frequent. It is to be noted that as cars are no longer owned by the rich alone, the proportion of cars driven by responsible trained chauffeurs

[4] National Automobile Chamber of Commerce, *Facts and Figures of the Automobile Industry*, 1927 Edition, p. 4.

becomes fewer, and all kinds of people drive about in them. Taxicabs and jitneys, manned by drivers who give only part of their attention to the road in front of them and the rest to possible customers, become much more numerous. And along with that there is the fact that the number of closed cars produced in recent years has been increasing rapidly, having mounted from only 10 per cent of those made in 1919, to fully 72 per cent of all manufactured in 1926.[5] This has meant more constant use of automobiles and, particularly, more frequent driving during bad weather, on slippery pavements and under bad traffic conditions.

The result found is that an increase in the number of cars in operation increases the traffic hazard several times more than that represented by the added number of cars. This problem as to just how much more has been of considerable technical interest to those studying the relation of automobile accidents to traffic density, and the authorities have worked out a tentative formula. The Director of Public Safety in Grand Rapids, Mich., in collaboration with the Statistical Bureau of the Metropolitan Life Insurance Company, has conducted an analysis which yields the extremely significant result that *doubling* the traffic density does not double the accident frequency, but *quadruples* it.[6] That is why comparison of the automobile accident rate of this

[5] *Ibid.*, p. 15.
[6] Metropolitan Life Insurance Company, *Statistical Bulletin*, July, 1926, p. 1.

country with that of England, or of any other country having a smaller number of automobiles in proportion to population, is entirely beside the point and yields nothing of significance.

It certainly cannot be considered an unexpected consequence of suddenly putting over 22,000,000 complicated motor engines into the hands of perhaps two or three times as many people, of all ages, temperaments and mentalities, that accidents have increased in number. These engines are being distributed in America at a tremendous rate, taxing our streets and traffic agencies to the extreme. And it is important to point out a fact which seems obvious, but which the propagandists disregard entirely, that nowadays a car added to the number registered is not used by the owner alone. In many more instances it is driven also by his wife, his children, by other relatives, and by friends, so that every car purchased adds several new operators. As the use of cars becomes more and more general, the opportunities for accidents are certain to increase, and at a rate which is appalling whether in proportion to the number of cars registered or not.

How does the foregoing analysis explain the increase in drunken drivers? The connection may not be apparent at first thought, but it becomes clearer when the various circumstances leading to increases shown in automobile accident statistics are studied. Among these circumstances are: (1) increased public concern about accidents; (2) a hue and cry by the newspapers; (3) the establishment of agencies

to stop accidents; (4) the granting of increases in appropriations for recording accidents and compiling statistics about them; and (5) greater administrative severity and efficiency. Examples of this are abundant, but three motor vehicle bureaus to be cited, because personally visited by the author, will suffice to trace the developments concretely. Only two of these, apparently the only two in the country, have statistics going back as many years before prohibition as since, which will explain the absence of nation-wide statistics other than those presented in later pages. The three instances to be cited all illustrate the fact that differences in administrative procedure account for much of the increase in accidents recorded.

DRUNKEN DRIVERS IN MASSACHUSETTS

In Massachusetts, until 1919, motor vehicles were not under the care of a separate government division, but under the old Highway Commission. But accidents became so frequent that the Commission was abolished, and a Registry of Motor Vehicles under a vigorous Registrar established in its place. He is particularly keen on keeping the statistics of accidents. He has established a statistical section, and has 130 inspectors to help him in the field. He goes to great lengths to get all the facts about accidents, and investigates a large number. He has even gone so far as to berate publicly the judges in many courts of the state who are too lenient or who fail to turn

in reports. He is severe to the point of harshness with offenders against the law, and is able to secure public support in behalf of his efforts both because of the menace of the increase in accidents and the interest he has been able to arouse by his reports. His staff has been growing rapidly.

It is natural to find that the statistics of his department show 18,705 suspensions and revocations of licenses for all causes in 1926, as compared with only 2156 in 1919, and to note that 4863 of those in 1926 were charged with driving under the influence of liquor, as against 554 in 1919. The facts supplied by the Registry are given below.

TABLE XIX. AUTOMOBILE ACCIDENTS, YEARLY REGISTRATIONS OF MOTOR VEHICLES, SUSPENSIONS OF DRIVERS' LICENSES, ETC., IN MASSACHUSETTS, 1914-1926

(Registry of Motor Vehicles, Massachusetts)

Year	Total Registrations of Motor Vehicles	Number of Persons Killed	Ratio Deaths to Registrations	Number of Persons Injured	Ratio Injured to Registrations	Suspensions and Revocations of Drivers' Licenses	Drivers' Licenses Revoked for Driving under Influence of Liquor	Licenses Revoked for Liquor Compared with Total Revoked (per cent)
1914	85,407	229	.00268	4,010	.04695	858	131	15
1915	112,153	294	.00262	6,197	.05525	1,153	202	18
1916	147,522	315	.00214	9,131	.06190	1,396	320	23
1917	185,339	438	.00236	7,282	.03929	1,831	485	26
1918	206,359	499	.00242	8,598	.04166	2,343	553	24
1919	260,881	582	.00223	16,287	.06243	2,156	554	26
1920	319,774	481	.00150	21,182	.06624	2,944	888	30
1921	372,790	544	.00145	11,487	.03081	4,899	1,508	31
1922	461,513	522	.00113	15,277	.03310	8,369	2,460	29
1923	577,883	578	.00100	16,217	.02804	11,613	3,333	29
1924	683,093	709	.00103	19,579	.02866	14,154	4,395	31
1925	774,671	755	.00097	25,736	.03322	16,249	4,654	29
1926	835,439	705	.00084	25,531	.03034	18,705	4,863	26

An analysis of the figures in Table XIX, allows interesting comparisons. A simple calculation, based on dividing the total number of persons killed during 1914-1919 by the sum of the cars registered during those years, yields the figure .0024 as the ratio of deaths to registered cars. A similar calculation for 1920-1926 shows a ratio of .0011, which is less than half that of the earlier pre-prohibition period. Comparing in the same manner the number of persons injured to the number of cars registered, the ratio for 1914-1919 is seen to be .0516, while that in the prohibition years is only .0335.

In the next place, the table shows the huge increase in disciplinary cases of all kinds in recent years, as indicated by the total number of drivers' licenses suspended or revoked. The percentage of these cases in which driving under the influence of liquor was a factor, at least as recorded in the statistics, does not show that prohibition has brought any marked increase in drunkenness among drivers. The more congested and perilous the traffic, the more frequent the opportunities for detecting the driver who is not in a normal state. Hence we can see in the years immediately preceding prohibition a big jump in the figures of licenses revoked for driving under the influence of liquor. The figures for 1916-1919 average almost 25 per cent, as compared with 16½ per cent for 1914-1915, a rise of over 50 per cent, while in no year during the prohibition period has there been an increase of as much as 25 per cent over the years 1916-1919. Indeed, during the seven

prohibition years the percentage has remained almost constant, or slightly declined, and the figure for 1926 is, encouragingly, no more than that for 1917 or 1919.

In making these comparisons, we do not mean to imply that the figures tell the whole story. Nevertheless, since the assertions of various people in this field are based on statistics, it is necessary to present and interpret them. The least that such analysis effects is a more critical attitude toward sweeping statements on this subject.

RHODE ISLAND

The Motor Vehicle Department of Rhode Island is another case in point. It suspended or revoked 48 licenses of operators on the ground of intoxication in 1919, as compared with over 47,000 cars registered: in 1926, 335 licenses were revoked for this cause as compared with over 112,000 cars registered. However, the increasing administrative severity is seen in the fact that in 1919 the total number of licenses suspended and revoked for all causes was 157, while in 1926 it was 1419. Information of considerable significance is contained in the letter received from the Chief Clerk of the Motor Vehicle Department of this state, who wrote us in 1926 concerning the increase in the number of suspensions and revocations of licenses, as follows:

> This increase is not alone in the instance of intoxicated drivers but is actually true with reference to other causes of suspension and is due to administrative changes in

the law together with the growing policy of exercising the right of suspension for the purpose of producing safer and better standards of driving.

Until the spring of 1925, the power of this board to suspend or revoke was a limited one and could not be exercised arbitrarily except upon a certified record of a court conviction. In all other instances where it seemed necessary to deprive operators of their licenses, a precedent to such action was a hearing. With the increase of thousands of operators each year, this system, of course, became cumbersome and conditions prevailing compelled a revision of the board's powers. Therefore the legislature of 1925 gave to the board the power to cancel, suspend or revoke an operator's license for any cause it might deem sufficient and with or without a hearing. It gave to the Chief Clerk the power to suspend for any cause he might deem sufficient, which action must be affirmed or overruled by the board within ten days. It is this right on the part of both Chief Clerk and Board which accounts for the tremendous increase recently in the number of licenses suspended, and I believe when the statistics for the year 1926 are compiled we will undoubtedly show a hundred per cent increase over that of 1925 in this respect.

I might add that we have attached to the department an investigating division and also a statistical division. The investigating division with its corps of inspectors is constantly busy, investigating accidents and complaints and conducting campaigns in the field in the interest of safety, while the statistical division compiles and analyzes the mass of data brought in by the investigating division. We also avail ourselves of course of other sources of information regarding accidents.

TABLE XX. AUTOMOBILE ACCIDENTS, YEARLY REGISTRATIONS OF MOTOR VEHICLES, SUSPENSIONS OF DRIVERS' LICENSES, ETC., IN RHODE ISLAND, 1914-1926

(Motor Vehicle Department, Rhode Island)

Year	Total Registration	Number of Persons Killed	Ratio Deaths to Registration	Ratio Injured to Registration	Total Number of Drivers' Licenses Revoked or Suspended	Drivers' Licenses Suspended or Revoked for Intoxication	Licenses Revoked for Liquor Compared to Total Revoked (per cent)
1914 ...	13,530	32	.0024	.031	44	19	43
1915 ...	17,783	53	.0030	.067	61	18	30
1916 ...	22,736	57	.0025	.031	42	9	21
1917 ...	31,879	70	.0022	.034	107	32	30
1918 ...	37,682	74	.0020	.020	112	46	41
1919 ...	47,134	98	.0021	.040	157	48	31
1920 ...	52,554	81	.0015	.035	235	93	40
1921 ...	56,353	96	.0017	.038	368	123	33
1922 ...	67,517	94	.0014	.039	439	168	38
1923 ...	78,719	101	.0013	.034	410	184	45
1924 ...	94,132	117	.0012	.037	513	262	51
1925 ...	103,304	135	.0013	.042	1,054	324	31
1926 ...	112,071	112	.0010	.045	1,419	335	24

An examination of the figures in this table and some calculations such as those made in connection with Table XIX, show that while the number of persons killed in proportion to cars registered was .0022 during 1914-1919, it was .0013 or about half during 1920-1926. The corresponding figures for persons injured are .0358 and .039, in this instance showing somewhat of an increase during the prohibition period. The drivers whose licenses were revoked on the ground of liquor averaged 33 per cent

of the total number of drivers so punished during 1914-1919, and 37 per cent during 1920-1926. In view of the increased hazards of driving under the conditions of the past few years, and the greater likelihood that a person under the influence of liquor will do something to call official attention to his conduct, there is considerable doubt that the statistics can be regarded as alarming evidences of the bad effects of prohibition.

CONNECTICUT

The same point is brought out by Robbins B. Stoeckel, Commissioner of Motor Vehicles in Connecticut, who, though confidently asserting that drunkenness is on the increase, and that this is one factor leading to the largely increased number of suspensions, offers on the other side of the picture that "the offense is now recognized as much worse than formerly because of the increased hazards of the highway, and less evidence is required to cause an arrest." He also writes that "the increase in the number of licenses suspended for drunkenness may not necessarily indicate an increase in the offense, but might indicate an increase in the disciplinary action against it."

In a letter written just before we went to press, Commissioner Stoeckel writes further that: "It is a fact that sentiment against spectacular crimes is increasing rapidly with the result that punishment is becoming much more severe." He gives as one

illustration the following incident: "In this morning's mail is a letter to a gentleman who recommends instituting a rock pile and sentencing drunken drivers five days' labor breaking stone for roads. This man is not a minister nor so far as I know even a deacon but just an ordinary citizen, to whom this particular crime seems abhorrent." [7]

PER CENT OF AUTOMOBILE ACCIDENTS ASCRIBED TO LIQUOR

It will keep the discussion of automobile accidents within its proper perspective if we get rid of the belief, bred by newspaper headlines, that the intoxication of the driver is an important cause of accidents; for in fact it is only a slight element in the larger problem. In New York State there were 30,153 automobile accidents recorded in the first half of 1926. A most detailed analysis of the causes of these accidents was made by the statistician of the Bureau of Motor Vehicles, and the total number of instances in which the intoxication of the driver was listed as a factor was only 244, or less than 1 per

[7] The author takes the liberty of quoting below another part of Mr. Stoeckel's letter, in which he passes opinion on the material in this chapter. The comment is included because it may be helpful to the reader to know that this material has the approval of one of the best informed men in this country on these subjects, who, at the same time, happens to believe that an increase in drunkenness is partly responsible for the increase in drunken drivers. He writes: "I have read over the galley proof and I do not see where I can make any suggestions or corrections. It seems to have covered even the obscure points affecting discipline, and I will certainly approve your chapter as being a fair statement of the situation at present."

cent. A similar proportion will be found generally, as the highest which the writer has come across is that of Massachusetts in 1924, where the percentage was given as 2.7 for accidents in which the driver appeared to have been drinking.[8]

If, however, we limit ourselves to accidents resulting in death, the per cent in which liquor was a factor becomes more significant. Such cases amounted to slightly more than 7 per cent of all accidents in Massachusetts during the years 1922-1926.

Fatal accidents in the country at large have increased, but there is little to indicate that prohibition had much to do with it. The ratio of fatalities to registration was almost twice as high in 1917 as it was during 1926. Statistics of the U. S. Census, cited by the National Automobile Chamber of Commerce,[9] show the automobile fatalities per 100,000 cars registered to be the following:

1926	95	1921	118
1925	100	1920	119
1924	100	1919	130
1923	109	1918	154
1922	112	1917	173

In making these comparisons, it is not intended to minimize the importance of reducing those fatalities and accidents due to liquor. The evil is obvious enough. But it is in point to correct the misimpres-

[8] For this and similar material see National Conference on Street and Highway Safety, *Report of the Committee on Causes of Accidents* (Washington, 1926), 24 pp., and *Report of the Committee on Statistics*, 1926, 27 pp.

[9] In its pamphlet, *Facts and Figures*, 1927, p. 58.

KANAWHA COUNTY LIBRARY

sions on this score, as there has been a tendency in some quarters to explain the automobile accident problem as if it were chiefly a matter of liquor. Commissioner Stoeckel makes the interesting point that: "As a matter of fact, absent-minded citizens figure much more largely in accidents than the drunken driver because there are so many of them, and they are, in my opinion, just as dangerous and possibly more so than the latter."

FUTURE STATISTICAL COMPLEXITIES

The statistics presented by the Moderation League in the pamphlet cited, and by others, in the attempt to alarm the country by showing that in Milwaukee, Wis., there was a 3209 per cent increase in drunken drivers since 1919, or in Boston a 383 per cent increase, if intended to prove that prohibition has been the sole cause of so huge a difference, constitute specious statistical nonsense.

For one powerful reason, the statistics of suspensions and revocations of licenses on the ground of intoxication are likely to show greater and greater increases for an indefinite period. This reason is that most states and cities have kept such records perfunctorily until recently, and that as sentiment crystallizes, and bureaus are created, they at once replace haphazard reporting by effective compilation of data. As the vast majority of states and cities are still backward, the statistics for several years more are likely to show huge increases in auto accidents

recorded, perhaps more than proportionate to the increase in cars, and similar increases in revocations of licenses for drunkenness.

We must expect this as city after city becomes more efficient in its reports. For example, the New York State Motor Vehicle Law, requiring the reporting of accidents, was not passed until October, 1924, and the collection of statistics did not begin until March, 1925. This situation is typical of many cities. The chief of police of St. Louis writes that he has not had the time to compile such records; and in Cincinnati the records date from December 1, 1925. Answers to the same effect came from nine out of every ten authorities addressed.

Changes in social habits must also be taken into account. The ownership of a car is an encouragement to people to dine at roadhouses miles from their own residences, and to visit socially in places that would have been considered too distant years ago. Many such people who have been drinking have to ride home in automobiles which they themselves drive. One official believes that: "This, no doubt, accounts in great degree for the increase in revocations and convictions for driving while intoxicated." He points out that the use of liquor is inseparably bound up with highway travel.

Opposed to the tendency toward increases in the statistics of accidents caused by liquor and of recorded automobile accidents in general, there are other tendencies, difficult to appraise, which will serve to keep the rates in the future lower than they

might otherwise be. It is believed that the increasing experience acquired by motorists and the stricter enforcement of traffic rules are leading to a larger degree of intelligence upon the part of the driver in operating his car. Another factor is the greater precaution being taken in several states to see that persons mentally or physically incapable of driving an automobile shall not be permitted to operate one. To cite just one instance, in the examination of applicants for drivers' licenses in New Jersey, the number rejected in 1914 out of 25,379 applicants amounted to 2732, or 11 per cent. Each year the examinations have been more severe, with the result that in 1926, out of 145,508 applicants, 27,350 were rejected, or 19 per cent.[10] But who knows whether the spread of auto ownership was among people of the same mental status as those who owned cars in 1914?

Another tendency which may reduce the accident rate or perhaps stabilize it, becomes evident when a long period of strict enforcement of the traffic laws persists, and active efforts to secure the record of every auto accident becomes the routine. This may be the explanation of the favorable showing in the rates in the past two years in Massachusetts and Rhode Island, given above, and in other statistics.

There are not wanting officials like W. L. Dill, Commissioner in charge of the Motor Vehicle Department of New Jersey, to assert that there has been more drinking, and that the strikingly large

[10] Commissioner of Motor Vehicles, *Twenty-First Annual Report,* for the year 1926 (Trenton, N. J., 1927), p. 52.

increase in the number of licenses revoked for intoxication is in part due to that. But others take the stand that administrative changes and other factors explain the statistics; while many are in doubt as to just what is going on. Events are moving fast, and officials cannot keep up with the situation that the widespread ownership and even more widespread operation of autos has developed. It should also be noted that some, prompted by official zeal, are likely to make any assertion stirring people into further appropriations and more severe laws.

Without wishing to take sides on the issue, we cannot see how prohibition can be blamed for the increase in drunken operators. In Commissioner Dill's latest annual report,[11] he calls attention to "the alarming increase of intoxicated drivers," and presents a list of the number of licenses revoked on this ground during the years 1918-1926. We have not made a table of these figures because they do not go back to 1914, and also because there was some difficulty in getting the total of licenses revoked for all causes during these years. The report shows a total of 5555 licenses revoked on the ground of liquor in the nine years mentioned. What is particularly striking is the fact that of the 2750 licenses revoked for all causes in 1926, 1254 are listed as "driving while intoxicated."

This is a serious situation enough, and Commissioner Dill asks the question, "Why is intoxicated

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[11] *Ibid.*, see pp. 54-57; 65-68, for facts and statements cited.

driving on the increase?" He states: "There seems to be but one answer—the ease with which liquor is obtained, thereby resulting in a large increase in the number of persons who now indulge and the apparent inability to successfully prohibit the importation, manufacture and sale of intoxicating liquor." Let us assume that the explanation is the correct one. We may then ask further: "Would the Government be able to reduce the menace of the drunken driver by making liquor even more accessible?"

There are insuperable difficulties in making comparisons between two situations that are as utterly different as the pre-prohibition traffic conditions and those today. The writer himself does not see how an increase in the number of drunken drivers recorded may be charged against prohibition, and does not understand why the number would be less if every driver, operator, and chauffeur could park his car in front of a saloon. An official in one of the progressive motor vehicle bureaus who is not, to our knowledge, a prohibitionist, writes: "If the present figures relating to drunken drivers are staggering, what would they be likely to be under an open-saloon régime? It seems to me that under the latter condition human life, at least in this country, would be simply intolerable, so great would be the hazards of our ordinary comings and goings." He may be moved to exaggeration because he is so close to the traffic problem, but his comment gives food for thought.

CHAPTER XX

PROHIBITION AND THE HIGH COST OF CRIME

THE excessive occurrence of crime was one of the outstanding problems of our frontier nation when drinking was unregulated, and it is a serious problem today. Crime has many aspects, but there is one which is particularly germane to our present discussion. Crime involves huge economic expenses and losses. Estimates of the cost of crime nowadays run up into many billions. Louis Seibold, in the New York *Evening Post,* of September 3, 1926, put the annual loss at around ten billion dollars. Mark O. Prentiss, of the National Crime Commission, makes one of the latest and highest bids, with an estimate exceeding thirteen billion.[1] These estimates are hardly more than guesses but they are useful in calling attention to the vastness of the problem even from an economic standpoint alone.

In pre-prohibition days it was customary to lay much of the blame for crime on drink.[2] Today the

[1] "Economic Consequences of Crime" in *Manufacturers' Record,* Feb. 24, 1927, p. 49.

[2] While we have doubts as to just when one can put one's finger on the cause of a crime, many studies have attempted it and come to conclusions that are significant for present-day discussion of the liquor problem. An example is the following:

"The statistics collected by this committee relate only to con-

situation seems reversed, and many people heap the blame on prohibition. The assertions so frequently made that the Eighteenth Amendment has been the cause of a "crime wave," take on additional importance if the economic consequences are considered. That the Amendment has caused a large increase in arrests for violation of the liquor laws is, of course, true, this being a natural result of making liquor illegal. But the question is: Has prohibition been responsible for a general lawlessness leading to an alleged wave of crime?

There is no aspect of prohibition which has been the subject of greater contention than this question. The "Wets" have made the matter of arrests and crimes the chief basis of their assertions regarding the failure of prohibition. The "Drys," on the other hand, having in pre-prohibition days made extrava-

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victs in State prisons and State reformatories. . . . The investigation covered 13,402 convicts in seventeen prisons and reformatories scattered throughout twelve States. It was conducted with great care, in many instances by the chaplains, in others by the superintendents of the institutions in question. Of the total number of cases thus investigated, it appeared that intemperance figured as one of the causes of crime in nearly 50 per cent. It was, however, a first cause in only 31 per cent. While, therefore, intemperance appears to contribute to crime in nearly half the cases investigated by us, a result which is strikingly confirmed by the investigation of the Massachusetts Bureau of Labor Statistics for that State, it was almost always only one of several causes, and appeared as a leading cause in less than a third, and as the sole cause in but 16 per cent. The difference between the importance of liquor as a cause of crimes against property and of crimes against the person is surprisingly small. It is, as would be expected, somewhat more prominent in crimes against the person, 51½ per cent. of such crimes being attributed to liquor, either on the part of the criminal or of others; but even in the case of crimes against property, the percentage is 49½." (Francis G. Peabody, *The Liquor Problem,* pp. 122-123.)

gant claims with regard to the extent to which the abolition of liquor would reduce crime, have felt obliged to do all they could to show how much better conditions are. The result is that we have a mass of statistics purporting to show alternately that the situation since the Volstead Act has been appallingly worse and remarkably better. To the serious student of crime, the available statistics are fragmentary, unstandardized, and difficult to interpret. To the advocates of one side or the other the evidence is "conclusive." We shall consider this evidence and try to see what the indications are.

THE AVAILABLE DATA

Omitting the many bits of testimony by this man or that with regard to the conditions in his home town, and confining ourselves to the available surveys of a national character, there are three investigations we shall consider as a basis of our discussion. The first, and most authentic, is the latest official U. S. Census report on prisoners committed to the prisons and jails of the country. The second is a tabulation on arrests for drunkenness since 1914 and up to about 1925, for several hundred cities of the country, compiled by the Moderation League, an organization opposed to the Eighteenth Amendment. The third is an even more elaborate survey of a similar kind made by the World League against Alcoholism.

We have gone through much of the material avail-

able on the subject we are considering, and done some field work to get an idea of the information at hand in certain localities. We have picked up interesting facts and figures but they cannot be considered satisfactory. After considering the matter, we have made no separate survey of our own, since anything really adequate would involve a huge staff, a large fund, and long and patient analysis. We have summarized the three reports mentioned, since they constitute the main evidence available on the subject and give the best general picture of the situation.

The U. S. Census figures throw considerable doubt on the existence of a "crime wave," and to some authorities refute the assertions advanced to this effect. These figures compare conditions in the prohibition year 1923 with those in the pre-prohibition year 1910. The comparison is found surprisingly favorable to 1923, for there was a marked reduction in the total number of commitments to prison, and a striking reduction in the number of commitments for drunkenness. Most offenses registered a decrease. There were, however, increases in some of the more sensational types of crimes, suggesting that the hue and cry about the crime wave, recurrent in the history of crime, may be explained there. With regard to these crimes the U. S. Census report offers an explanation which is of considerable significance with regard to prohibition, as will be shown.

The reports of arrests for intoxication in several

hundred municipalities, collected by the Moderation League through 1925 and by the World League against Alcoholism through 1924, agree in several particulars, and differ chiefly in the interpretation given them. The reports agree in showing much higher ratios of arrests for intoxication to population in those cities in the pre-War years than in any year since prohibition. They show marked reductions in the number of arrests during 1918, 1919 and 1920, and an upward trend since then, but not reaching a point in the latest years for which facts are given, within striking distance of the number of arrests in pre-War years.

The particularly good record for the years 1918-1920 is the subject of considerable contention between the "Wets" and the "Drys." The former disregard all other possible factors, especially the obvious fact that during 1918 and 1919, millions of adult drinkers were abroad or in camps, under military rather than civil supervision, and state that the good record of these years is due to more moderate restrictions with regard to liquor. That during part of 1919 and all of 1920, the country was bone-dry, does not seem to matter. The "Drys" and the World League against Alcoholism, on the other hand, take comfort in the fact that conditions are not as bad as in the normal pre-War years. They explain the increase in recent years by the statement that police departments have become much more severe with inebriates now that liquor is illegal, and that the proportion of inebriates arrested to those intoxicated

is more than twice as high. We shall now consider these three reports in more detail.

THE U. S. CENSUS REPORT

The statistics of the U. S. Census are authoritative and reliable, but unfortunately are not collected frequently enough to give us an idea of the trend. The last U. S. Census report [3] contains exhaustive facts, for the year 1923, on commitments to the prisons of the country, Federal, state and local, and makes comparisons with the year 1910, when the last similar census was taken.

The largest single offense for which people are imprisoned is drunkenness. The number of persons committed to prison for this reason in 1923 was only 91,367, as against 170,941 in 1910. A closely allied cause, not sharply divided from drunkenness, is the charge of disorderly conduct, which dropped from 91,847 commitments in 1910 to 53,359 in 1923. Considering these two offenses in relation to increase of population, there was a decrease in 1923 of 55 per cent in the number of persons committed for drunkenness, as compared with 1910; and a decrease of 51 per cent in the number committed for disorderly conduct.[4]

The report shows further that the total number

[3] U. S. Department of Commerce, Bureau of the Census, *Prisoners, 1923: Crime Conditions in the United States as Reflected in Census Statistics of Imprisoned Offenders* (Washington, 1926).
[4] *Ibid.*, p. 29.

of commitments to prison, for all offenses, dropped from 479,787 to 357,493 during this period, representing a decrease of almost 38 per cent if allowance is made for the population increase.[5] The reduction is even more striking if we consider the fact that in 1923 we had two large categories of crime, violations of the Harrison Narcotic Drug Act and violations of the traffic laws, which were of slight importance in the figures for 1910; and that additional liquor restrictions by the states, as well as the Federal Amendment, resulted in 39,340 commitments for violations of liquor laws in 1923, as compared with only 7713 in 1910.

The statistics would be clearly favorable to prohibition if there were not certain administrative factors to take into account, chiefly the tendency, in certain states, to use probation instead of imprisonment for certain offenses, including drunkenness. There has also been less disposition to send young offenders to penal institutions, in favor of placing their cases on file and putting the defendants under probation. On the other side of the picture is the tendency, reported everywhere, for the police to be more severe with persons in an intoxicated condition, leading to more frequent arrest of such persons than was normal in the days when drink was legal and drunkenness only an amiable weakness for the police to disregard, if possible. How to balance such conflicting elements in the statistics is

[5] *Ibid.*, p. 19.

a matter of interpretation that might be cleared up in part by detailed and exhaustive analysis, but at best will remain a matter of judgment.

The disturbing feature of the census report is that while the commitments for most offenses have decreased, there were increases in commitments for robbery, forgery, rape and, to some extent, homicide. The foes of prohibition naturally find the Eighteenth Amendment responsible. But an analysis shows proportional decreases in the number committed for burglary, larceny, fraud, assault, trespass, and similar crimes. An explanation made by the U. S. Census itself throws significant light on what may have occurred.

What the U. S. Census asserts is that the same criminals who committed burglary or fraud have merely turned their energies from the less serious crimes to the more serious ones. It states: "Several of the gainful offenses against property showed a decrease, and the decreases for larceny, burglary, and fraud are of considerable interest and importance, as indicating a probable diversion of activity for a large proportion of habitual criminals from certain gainful offenses against property to others of the same class, and a turning aside from this whole class of offenses to liquor and drug selling, as the enactment of prohibitory legislation, especially the Federal laws, made the latter pursuits increasingly profitable." The implication here is strong that legitimatizing narcotic drugs and liquor so that no one could profit by it, would only mean a corre-

sponding increase in burglary, forgery, and similar crimes by the same criminal types.[6]

Homicides have been increasing since prohibition, but they were also increasing before prohibition. The rate per 100,000 persons, in the registration area of the United States, now covering about 90 per cent of the country's population, is given below for the years 1900-1925. It shows a much greater increase in the period 1900-1910 than in the whole period 1911-1925. We deduce no moral from these figures, but supply them merely because their availability will tend to keep the discussion of crime within the bounds of known facts.

TABLE XXI. HOMICIDE RATE IN THE UNITED STATES, 1900-1925

(Annual Volumes on *Mortality Statistics*, published by the U. S. Census)

Year	Homicide Rate per 100,000 Population	Year	Homicide Rate per 100,000 Population
1900	2.1	1913	7.2
1901	2.3	1914	7.4
1902	2.3	1915	7.0
1903	2.6	1916	7.1
1904	2.8	1917	7.7
1905	4.6	1918	6.8
1906	5.1	1919	7.5
1907	6.5	1920	7.1
1908	6.7	1921	8.5
1909	5.6	1922	8.4
1910	5.9	1923	8.1
1911	6.6	1924	8.5
1912	6.5	1925	8.6

[6] *Ibid.*, p. 31.

GENERAL ARRESTS AS AN INDEX OF CRIME

The fact that a community has had many more arrests during the past few years than in the decade previous does not necessarily indicate that the community has become more lawless. It may mean that there are many more regulations for the citizen to observe and that conditions have increased the likelihood of violations. Many arrests may be for causes not considered criminal at all, such as parking one's car in the wrong place. In other cases, new ways of classifying arrests may lead to an apparent increase in crime. Only by a statistical analysis of standard offenses can a real comparison be made. These points will be made clearer by an incident related to the author by one of the best known authorities in criminal statistics.

About a year ago, Sanford Bates, Commissioner of Correction for Massachusetts, and President of the American Prison Association, made an address at a meeting of police officials in his state in which he asserted that there was no crime wave in Massachusetts and no increase in the number of crimes in the country generally. He stated that certain spectacular crimes, such as bank robberies, were increasing, but that the general volume was downward, and that increases in the number of arrests were due chiefly to violations of traffic regulations and similar laws which were not of great importance fifteen or twenty years ago. Many of the police chiefs present were skeptical.

A short while later, the police head of Arlington, Mass., came in with a report he had prepared as a result of Commissioner Bates' assertion. He had not believed it when he had heard it, for it had been settled in his mind for some time that there was a crime wave. On analyzing the facts, however, he found the situation to be quite different from what he had anticipated, and stated it to be as follows:

There were 339 arrests during the year 1905, as compared with 1956 in 1925. Classifying these by causes, he found that there were only three arrests for violation of the auto and traffic laws in 1905, as against 1326 such arrests in 1925. He found, too, that many of the arrests in 1925 were not Arlington cases at all, but made in coöperation with police officials in other towns and cities—a practice which had developed rapidly since 1905. The result was that while there were no warrants and summons served by Arlington police for the police departments of other communities in 1905, there were 309 such arrests in 1925. When he deducted these two classes of arrests, it was seen that in spite of an increase in population in Arlington from 9672 to 24,943 during the period, there were only 327 cases of Arlington arrests in 1925, as compared with 336 for similar offenses in 1905.

This, it appears, is by no means a unique situation, and indicates how unreliable are the crude statistics of arrests which are so prevalent in the discussion of crime today. Only an analysis of the trend in terms of similar offenses against the law

gives us any idea as to whether the country is getting worse or better. If there are many who assert that we are in the midst of a crime wave, there are authorities who throw doubt upon it. They state that it is the sensational character of some of our present-day crimes and the flagrant violation of the prohibition law by bootleggers, coupled with the featuring of crime news, that may be considered responsible for the impression of a crime wave.[7]

For these reasons we shall now consider the data dealing specifically with arrests for drunkenness, as compiled by the two chief research agencies in the controversy about prohibition.

CONTENTIONS OF THE "WETS"

The chief contentions of the "Wets" are statements made in the brief of the proponents of modification of the Volstead Act, in the proceedings of the Senate committee hearings,[8] using as their factual basis the material published by the Moderation League and the evidence given by judges and other officials summoned to testify on their side. The Moderation League material is their main reliance. It consists of a pamphlet prepared by Stanley Shirk, the research director, which asserts that arrests for intoxication have increased since prohibi-

[7] See, for example, George W. Kirchwey, "Crime Waves and Crime Remedies," *Survey*, March 1, 1926, pp. 593-597.

[8] U. S. Senate Committee, *Hearings, op. cit.*, Vol. II, pp. 1610-1625.

tion, and that in this respect conditions are much worse than before.[9]

In this report, statistics of arrests for intoxication are presented for 384 municipalities for the years 1914 to 1925. Mr. Shirk did not, however, take the trouble to join with this the figures showing the population of these communities, so that we do not have the statistics of arrests in proportion to increase in population, as the situation certainly demands. The figures as given are:

Year	Number of Arrests for Intoxication in 384 Communities	Year	Number of Arrests for Intoxication in 384 Communities
1914	523,049	1920	233,837
1915	528,347	1921	317,492
1916	557,634	1922	425,353
1917	542,039	1923	499,322
1918	423,048	1924	515,199
1919	309,760	1925	533,483

Robert E. Corradini, research secretary of the League against Alcoholism, whose facts we shall cite presently, asserts that some of the data are inaccurate, and also that Mr. Shirk has included charges for "disorderly conduct" in Chicago as being synonymous with drunkenness, thus adding many thousands of people arrested for other reasons.[10] We shall, however, disregard various criticisms of this sort that may be made, except as they appear in

[9] The Moderation League, Inc., *A National Survey of Conditions under Prohibition, 1926* (New York, 1926).

[10] U. S. Senate Committee, *Hearings, op. cit.*, Vol. II, p. 1477.

quoted extracts, and take the figures at their face value. As such, we cannot avoid objecting to the interpretation put upon them by Mr. Shirk. He states:

> The figures for 1914 to 1925 reward analysis, inasmuch as they show the pre-prohibition level. During 1914 and 1915, before the war boom got under way, drunkenness remained practically stationary.
>
> During 1916 and 1917, war boom years, there was a perceptible increase, following the known rule that, other things being equal, drunkenness increases with good times and decreases with hard times.
>
> In 1918 and 1919 emergency war-time restrictions on alcoholic beverages [far short of bone-dryness, however] were imposed. Drunkenness took an astonishing drop during those years. Near the end of 1919 the Volstead Act went into effect. In 1920 there was a further drop which the 1921 rise wiped out. Since then there has been an increase each year, so that by 1925 there were more arrests for drunkenness than in 1914. . . .
>
> It is noteworthy that under the semi-dry war-time restrictions of 1918-1919 there was a remarkable precipitate drop in drunkenness, and that under the bone-dry Volstead Act there has been an equally abrupt rise.

The statement that "by 1925 there were more arrests for drunkenness than in 1914" is a deceiving one. Had Mr. Shirk compared the increase in arrests to the increase in population, he would have seen that with the rapid growth of urban communities, the proportion of arrests to population was still lower in 1925 than it was in 1914. We shall, how-

ever, pass by this and similarly ambiguous statements in order to consider what is the most striking assertion made, viz., that the low figures of arrests in 1918, 1919 and 1920 represent the success of the milder liquor restrictions. If this is true, it is important.

Just how he arrives at this conclusion is obscure, but it is used as if it were gospel in the brief of the "Wets." This brief calls Mr. Shirk's figures "conclusive, overwhelming, and unchallenged proof that the trend toward national sobriety under sane restrictions which enabled citizens to supply their requirements for beer and wine of low alcoholic content, which was progressing so favorably between 1917 and 1919, was completely overthrown by national prohibition." [11] They utterly ignore the fact, shown in Mr. Shirk's figures, that the lowest point, 1920, was a bone-dry year, and that part of 1919 was equally dry, under war-time prohibition. Further doubt is thrown on the significance of the assertion when it is seen that in Paris, in London, and other cities abroad not suffering from prohibition, arrests for intoxication show the same recession in these years, and an increase since.[12]

The Moderation League and the brief of the "Wets" to the Senate committee absolutely disregard the possibility that stricter dealings with inebriates by the police may be a factor in the statistics. An example of this is their contention, as if

[11] *Ibid.*, p. 1614.

[12] *Ibid.*, pp. 1475-76.

it were a feather in their cap, that inasmuch as Philadelphia, under General Smedley D. Butler, during 1924 and 1925, had more arrests for drunkenness than during preceding years, this proved that drunkenness was more prevalent.[13] It never seemed to have occurred to them that his aggressive attempts to curb violations of the law might merely have meant more arrests for drunkenness, not necessarily more drunkenness.

CONTENTIONS OF THE "DRYS"

The World League against Alcoholism has published a good deal attempting to show that arrests for drunkenness have become less serious a problem, but has lately been occupied chiefly in disproving the assertions of those who claim that crime and arrests for drunkenness have increased. At the Senate hearings a year ago, Robert E. Corradini, the League's research secretary, presented a long memorandum,[14] which included a compilation of the records of 514 cities and towns, covering 39 states and the District of Columbia.[15] We cite the facts for 1914 to 1924, the last year for which they are available, in the table on the next page.

It is seen that the ratio of arrests was high in 1914-1917, dropped markedly to 1920, and has been rising since 1921. Mr. Corradini's low figure for 1924 is, however, not nearly as high as those for the

[13] *Ibid.*, p. 1615.
[14] *Ibid.*, pp. 1468-1525.
[15] *Ibid.*, p. 1504.

Year	Arrests for Drunkenness per 10,000 Population	Year	Arrests for Drunkenness per 10,000 Population
1914	169	1920	60
1915	165	1921	84
1916	176	1922	111
1917	169	1923	126
1918	124	1924	127
1919	97		

years 1914-1917. He asserts that the figures mean little, since the increase shown in the number of arrests is due to the increased activities of the police since prohibition, not to any real increase in drunkenness. We do not, however, share in the optimism with which he predicts that figures for 1925 and 1926 will show that 1924 was the peak and that hereafter there will be a recession. We shall wait to be shown. Having begun the series of figures, the obligation is strong for the League to continue compiling them, even if they should continue to be adverse to what the League would prefer.

CONCLUSION

The experience of the next few years will tell whether the trend is toward an increase in arrests for drunkenness above the point of normal pre-prohibition years or not. We do not regard comparison with 1918 and 1919 as fair, but 1920 figures suggest that probably the law was regarded more seriously then than in more recent years, or that liquor was

harder to get, or that poison liquor was more of a deterrent. While we are not alarmed by some of the assertions of the "Wets"—and they have not proved prohibition a worse influence in crime than non-prohibition—we should not be soothed by the arguments of some of the "Drys" that the situation is so very much better than in the old days that the record is satisfactory. There is a need for accurate figures, compiled promptly, and emanating from some impartial and authoritative source, especially for 1926, 1927, and 1928, for these are years which will determine whether the tide of arrests is receding or advancing.

An authority on the "dry" side explains the unfavorable experience of the years immediately following prohibition by the failure of the states to pass enforcement laws, and points to the better experience in her own state (Massachusetts) during 1925 and 1926, as resulting from the passage of the state's prohibition enforcement law in December, 1924. The implication is that the figures for arrests in general and for drunkenness are becoming stabilized, and will soon begin to recede.

Another explanation may be the changed attitude of the Nation since 1920 toward drink as compared with the attitude in the War years and in 1919. During the War there was a constant public agitation for sobriety to "help win the War," and in the psychology of the period it would have been deemed disloyal to advise otherwise. With the War over and prohibition in force, the pendulum swung back.

There was a distinct reversal in sentiment, and both prohibition and abstinence have been constant objects of ridicule. There have even been prominent citizens who have addressed the public on why the prohibition law should not be obeyed. And so the drinking of alcoholic beverages does not, outside of industry, meet with the social disapproval that it did in, let us say, 1918, when it was unpatriotic.

Nation-wide statistics as reliable as those of the U. S. Census, taken at least in alternate years, will probably enable us to determine whether the law is breaking down or not. The present situation is not reassuring and only a knowledge of the trend will enable us to formulate the proper policy.

CHAPTER XXI

PROHIBITION: ITS LONG-TIME ECONOMIC EFFECTS

WE are confronted with the problem of assembling the various parts of our previous discussion and drawing some general conclusions. These, it must be noted, are limited to the economic and industrial effects, leaving the merits of prohibition as a whole an open question. For the economic and industrial effects constitute only one aspect of the subject, and of themselves cannot be considered adequate reason for retaining or discarding the prohibition law.

From the standpoint from which we are considering the question, there are certain economic advantages and some economic disadvantages of prohibition. Just what basis to use in striking a balance is somewhat puzzling. If we adopt a temporary balance sheet, measuring the losses and gains of a single year, or of a short period of a few years, we get an indefinite answer because a good deal depends on the year or period selected. For example, in 1920 prohibition meant the scrapping of a huge investment in brewery and distillery property and losses in the value of acreage devoted to the production of high grade barley and other products. Whatever the economic advantages of prohibition that year,

these various losses probably put prohibition then "in the red ink." On the other hand, during the past three years we have had phenomenal prosperity. To give undue weight to that factor may be taking advantage of circumstances perhaps temporary and fortuitous, for we do not know but that an equally extreme depression may be just around the corner.

LONG-TIME VALUES THE CRITERION

With these reservations in mind, it seems best to evaluate the experience of the past eight years under prohibition by reference to the permanence of the effects produced. Are the losses, no matter how severe, temporary, and likely soon to be liquidated and forgotten? Or are they recurrent and increasingly draining on the economic system? Are the gains temporary and incidental, or are they permanent changes leading to efficiency of production, to the redirection of effort and purchasing power, to improvements in the circumstances and manner of living of the great mass of wage-earners?

When we review the economic results of prohibition from this point of view, we are led to draw two broad conclusions—one gratifying, the other disquieting. The more pleasing is that, up to the present, the economic advantages of prohibition have greatly overbalanced its economic disadvantages, and that with better enforcement of the law the change has enormous economic potentialities of a permanent character. The less comforting, which

we shall discuss at the conclusion of the chapter, is that certain statistical data which may or may not be indexes of the workings of the law, have not been wholly satisfactory these past two years. It appears that prohibition is in the throes of its most crucial experience, and the next few years bid fair to be decisive in establishing how far the present legislation can achieve its purposes.

ECONOMIC LOSSES CAUSED BY PROHIBITION

The economic losses caused by prohibition seem to be the easiest to dispose of, and we shall treat them first. As far as we are aware, economists and others with a neutral view toward prohibition have made no great point of the economic disadvantages of prohibition, leaving the field for attacks from that side entirely to those with a definite financial stake in the liquor industry.[1] The objections raised

[1] While many economists have made statements that prohibition has been an aid to our productivity and prosperity, the writer recalls none who have taken the opposite stand. At the round table discussion on prohibition at the annual meeting of the American Economic Association held in St. Louis, Missouri, December 28, 1926, no one expressing views against prohibition on economic grounds was present. Professor Irving Fisher, chairman in charge of this discussion group, asserts: "I got a list of the economists who are supposed to be opposed to Prohibition, and wrote to them; and they all replied either that I was mistaken in thinking that they were opposed to Prohibition, or that if we were going to confine the objection to the economics of Prohibition they would not care to respond. When I found that I was to have no speaker representing the opposite point of view, I wrote to all of the American economists listed in the 'Minerva' and all American teachers of statistics. I have not received from any one an acceptance." (*The American Economic Review,* Supplement, March, 1927, p. 5.)

against prohibition by the latter are exemplified in the brief filed by the proponents of modification of the prohibition law, at the Senate Committee Hearings in April, 1926.[2]

In the first place, they call attention to the harm that the law did to the brewing and distilling industry. This is undoubtedly true, having been contemplated by the Act. As a previous chapter has shown, the Amendment outlawed a large amount of valuable property, plant and equipment, a good part of which has actually been scrapped for junk. The seriousness of the loss being admitted, it is to be noted that most of the loss has already been liquidated, and in a comparatively short time the total involved will have been absorbed in the stream of industry and forgotten. The waste is not a recurrent one.

The second point in the brief is the plight of the farmer. Just as some "Drys" attribute to prohibition all of the enormous increase in commercial and industrial prosperity, the "Wets" often try to saddle on prohibition the economic embarrassment of certain agricultural groups. They do not include in the balance the increased demand for dairy products, the high profits of the grape-growers, and other factors, but their cardinal error is to try to give the impression that the fundamental economic problem of farm relief is a matter of the modification of the Volstead Act.

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[2] U. S. Senate Committee, *Hearings, op. cit.*, Vol. II, pp. 1610-1625.

There is no question, however, that prosperity has, on the whole, been more general among the commercial and industrial classes. Prohibition is not the reason why all farmers are not prosperous, but prohibition has been no particular economic advantage to the farmer. In a chapter presenting the statistics of products used by brewers and distillers, we have shown what prohibition meant to certain groups of farmers—the hop-growers and the producers of fine barley.

Admitting that the farmers must be left out in estimating the economic advantages of prohibition, the losses incurred by them are not the same as those of the brewers and distillers. The land is there; it has been, in the great majority of cases, planted with other crops. Fundamental disorganization in the farming industry has prevented the readjustment from being as easy or profitable as it might have been; but when conditions bring a change to prosperity for agriculture, the conversion will be complete, and the losses in demand from the liquor industry will soon be forgotten.

In the third place, the brief asserts that "a vastly greater amount of money is now being spent for some kinds of alcoholic liquors than before prohibition." This is a guess, and in our judgment, unsupported by plausible evidence. We have, in several places, and particularly in Chapter III, paid our repects to the fact that a huge amount of liquor is illicitly sold today. Anyone who is at all conscious of what is going on must realize that. But over

90 per cent of the volume of alcoholic consumption in pre-prohibition years was beer, and most alcoholic beverages were consumed in saloons. Without being in any better position to state exactly how much is being consumed today than are those who hold a contrary opinion, we have indicated in Chapter VIII our reasons for concluding that the mass of the people are not spending anything like the amount on drinks that they did when the saloon was the first place the worker visited, or was forced into, after work or after pay-days. The effort to prove that the majority of the people are spending more on drink today than formerly is to us far-fetched.

Finally, much is said about the loss in taxation. In a certain measure, there has been a loss, but it is only a small fraction of that usually stated. For in the sense that most people opposed to prohibition use the term, the word "loss" is a misnomer. Taxes came from the people before prohibition and they come from the same source now. The absence of excise taxes or license taxes is made up by taxes from other sources, so that prohibition involves, chiefly, an administrative change in the incidence of taxation. Where the real loss of taxation does occur is in connection with the illegal production and consumption of liquor. To the extent that the bootlegger operates, he has taken the place of the government official in the collection of a tax; and if the government is not more efficient in stopping it in the future than it has been in the past, his toll is a permanent drain.

Related to the subject of losses in taxation is the cost of enforcing the law. Congressman Vare, of Pennsylvania, testifying for the "Wets" at the Senate Committee Hearings in April, 1926, secured some figures showing the appropriations for the Prohibition Service and the Coast Guard. For 1927, he estimated the prohibition costs to the Federal Government as $25,000,000 in direct appropriations, aside from the additional burden on the Federal courts and Department of Justice.[3] We shall not point out that Federal liquor laws were enforced before prohibition, or criticize the figures in detail, because, even if they are high by several million dollars, they are not as high as would be necessary if the government got down more seriously to the enforcement of the law. In the immediate future, at least, prohibition will certainly not be successful on any basis of low appropriations for enforcement, and it should be discussed in terms of high figures. If one assumes that the tighter the enforcement the less bootlegging there will be, then the greater the appropriations for enforcement the less the loss in taxation through illegal consumption. This is a relationship which we suggest as likely, but which will have to prove itself by experience rather than on *a priori* grounds.

We trust we have given place to the outstanding losses resulting from prohibition and have stated them fairly. We shall now consider the advantages

[3] U. S. Senate Committee, *Hearings, op. cit.*, Vol. I, p. 134.

of this measure, and endeavor to strike a balance. Our first attention will be given to the industrial effects. We shall then consider the relation to business and prosperity, and finally the general economic aspects.

ADVANTAGES TO PRODUCTION

Summarizing several chapters dealing with the industrial effects of prohibition, we find that employers and executives are, on this matter, overwhelmingly favorable to prohibition as far as it affects production and business. We do not claim to have proved anything scientific on this score, and it is probably true that some employers attribute to the Eighteenth Amendment improvements which the developments of the past eight years would have brought anyhow. We tried very hard to get quantitative material, and we know now beyond doubt that it does not exist. The only evidence available was the testimony of employers and executives themselves, and in this we feel that we secured a good cross section. Their observations may be faulty but it is the best material one can get. Judging from interviews and from questionnaires which they returned, we can say with confidence that the great majority of employers report that:

1. The disciplinary problem of dealing with inebriates has become much less serious since prohibition, and the number of discharges for intoxication is markedly smaller.

2. The age-old difficulty of keeping a full force at work after pay-days is now a thing of the past, having disappeared entirely in many plants and been reduced considerably in most.

3. While there are no statistics showing the part played by intoxication as a cause of accidents, the whole subject of the relation of drunkenness to accidents has become passé since prohibition. Not a single employer claimed that conditions were worse in this respect, while many asserted that they could see decided improvements resulting from the abolition of saloons.

4. As a group the workers are of higher type, steadier, stronger, clearer-headed, more alert, and more efficient, because removed from the temptations which worked havoc with men unable to resist the demoralizing social influences of the saloons.

5. In spite of home brewing, plenty of available speakeasies, bootleggers, and other evidences of lax enforcement and uncertain workings of the law, the mass of wage-earners are much better off because of the abolition of the saloons.

Should anyone feel skeptical of our assertion that the great majority of employers are highly favorable to prohibition as far as they have observed its effects on industry, it must be made clear that no attempt whatever was made to secure a poll as to how they felt on the subject as a personal matter or a political issue. The interviews held and the questions asked were always directed to specific observed results—on production, on business, and on the habits and circumstances of the wage-earners. The writer frequently came across executives who, themselves

violently opposed to the Eighteenth Amendment, nevertheless had much to say of a favorable nature concerning prohibition, or nothing against it when asked about the industrial effects. For employers as a whole have always been bitterly opposed to the saloon and have suffered much from it.

It is significant that not a single person seemed to have a kind word for the saloon. Even those with the most pronounced "wet" sentiments seem glad it is gone. An example of those writing in this vein is the following, from the head of an iron company in Dayton, Ohio:

> We do not believe that drinking has become much less prevalent since prohibition, though the drinking problem has become less serious from the standpoint of industry. There is certainly not so much drunkenness. The explanation of this is, we think, to be found in the absence of the saloon.
>
> My own conclusions are that the Eighteenth Amendment was a mistake and that national prohibition is a failure in many important respects, but the abolition of the saloon was a boon to society and certainly an aid to industry.

The favorable results of prohibition from the standpoint of industrialists, as reported in this study, are based on the writer's own survey. Should other material in support of this have been sought, it is ample indeed, and is almost all to the same effect.

The British Government's Delegation appointed to study industrial conditions in Canada and the

United States made an important point of prohibition, in its report, stating that "its economic effect has been very great by diversion of large sums of money into savings and the purchase of commodities and by increasing the regularity of attendance at work." [4] The recently completed nation-wide survey of the National Federation of Settlements reports many disagreements on the workings of the law but states that: "The results that seem to be directly due to prohibition are that the lower wage group has profited everywhere; that business and production have profited; also, that in general the business men and the manufacturers are so well satisfied with the economic results as to be in favor of the law." [5]

According to Herbert Hoover, Secretary of Commerce, "there can be no doubt that prohibition is putting money into the American family pocketbook. The dry law has proved its worth in dollars and cents."

If there is anything in such statements, the astounding increase in national wealth during the past few years becomes of interest here. According to the figures issued in 1927 by the National Bureau of Economic Research,[6] the total national income

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[4] *Report of the Delegation Appointed to Study Industrial Conditions in Canada and the United States* (London, His Majesty's Stationery Office, 1927), p. 13.

[5] Martha Bensley Bruère, *Does Prohibition Work?* A study of the operation of the Eighteenth Amendment made by the National Federation of Settlements, assisted by social workers in different parts of the United States (New York, 1927), p. 302.

[6] In its *News-Bulletin* of February 21, 1927.

of the American people, in figures calculated in terms of 1913 dollars as a standard (dollars based on the price levels of 1913), was $35,500,000,000 in the War year 1918, and $52,900,000,000 in 1926, or 49 per cent greater. The increase of $17,400,000,000 is more than twice as great as the increase in the period 1909-1918, and if figured on a per capita basis, in 1913 dollars, the increase in income was more than four times as great. In these comparisons those favorable to prohibition have a huge advantage in that the trend of such facts is in their favor. It would be foolish for them to claim too much, and unwarrantable by any available statistical data to make any precise estimate of the value of prohibition.

EFFECTS UPON CONSUMPTION

To produce prosperity, increases in production and in income must be based on analogous increases in consumption. Testimony comes from everywhere that a good deal of the money that was spent in saloons on liquor, in treats, and in profligate ways induced by the environment, has been diverted to other commodities. Everyone admits that there is much drinking going on today, and no one denies that the small group of wage-earners who insist on drinking as much as formerly have less money. But those whose observation is widest—and this includes some authorities in the liquor industry itself—admit that many more people are spending less. This is the case under prohibition for two reasons. Many

people cannot afford the price of liquor and do not care enough about it to buy it; others make their alcoholic beverages themselves and so are not under the same temptation to spend the much-needed contents of the weekly pay envelope in the forgetful environment of the saloon.

It cannot be repeated too often that, from the economic standpoint, the question is not how much people drink, but how much they spend for drink, and what effect their practice of drinking has on their pay envelopes. This we have taken up in more detail in an earlier chapter. We have indicated, in Chapter VIII, that the country's annual drink bill in saloons could easily total $2,000,000,000 if the purchase of liquor were as unhampered today as in 1914; and we have also indicated that the bootleggers' best trade comes from a different class of society than that patronizing the saloons in the old days. The bootleggers' clientele today contains a much larger proportion of people whose incomes can stand the strain of high-priced liquor.

If a good deal less is spent on liquor by the masses than before, we may ask, (1) what is it going for, and (2) why is it important economically that money is going for these other things instead of for liquor?

Answering the first part of the question, we have brought out in previous chapters that:

1. Contrary to popular impression, the consumption of alcoholic beverages was not declining before prohibition

but increasing faster than population, as shown by the fact that the per capita consumption of distilled spirits, beer, and wine was markedly higher a few years before prohibition than at any time in the present century. This means that we had by no means reached the saturation point in saloon expenditure and that had the same increases in wages occurred during these few years without prohibition as have occurred with it, a good part of these increases might have been spent in saloons rather than on other things. The question whether or not the statistics prove that sobriety was decreasing is another matter, discussed more fully in Chapter II.

2. Part of the desire for the saloon's beverages has been diverted to milk, ginger ale, root beer, and other soft drinks; some benefit may have been reaped by the coffee trade; ice cream and candy stores have gotten a good deal of extra trade because of the closing of the saloons; cafeterias and small lunch rooms have taken over the food features.

3. The loss of the recreational features of the saloon left a great gap in the leisure time of many wage-earners accustomed to spend their evenings and part of their week-ends in its congenial, though demoralizing, environment. The unsatisfied desire for recreation is regarded in the motion picture industry as having led to a great deal more attendance at movies by wage-earners, often with their families. The absence of the compulsion to spend on drink which the saloons, as recreational institutions, represented, made it possible for many a man to buy a car or a radio, or to take part in other forms of recreation. Many such changes have occurred, representing economic benefits to other industries catering to a desire for recreation.

4. The statistics of thrift show a great increase in the number of individual savings bank depositors and in the average amount per deposit, a striking expansion in industrial insurance paid in weekly and monthly premiums and an enormous expansion in the assets of building and loan associations; and while no one would attribute to prohibition more than a share of these increases, most authorities and most persons consulted do credit prohibition with having had a favorable influence in encouraging these economic trends.

5. The wage-earner has been led to take a greater interest in his home, and as a consequence of lessened expenditure for drink, as one factor, his standard of living is very much higher than it was formerly. In this way a variety of industries have been able to increase their markets by catering to the masses, and the abolition of the saloons has sent ripples of purchasing power over a wide area of trade.

6. While increases in real wages are to be taken into account (and they have been given their weight), such increases alone do not explain why so many of the people whose incomes were impaired by drink in the past would not spend their increased earnings in the saloon if the old conditions existed.

7. Economists are agreed that the most striking increases in production in the past few years have been in manufactured goods devoted to recreation and diversion or which have brought radical changes in manners of living. Many goods formerly classed as luxuries have today become necessities or, in any event, are found almost universally in use among the masses. Thus the increased market due to the abolition of the saloons has been one influence in the circle of production and con-

sumption upon which prosperity of a permanent kind may be based.

ECONOMIC IMPORTANCE OF THE REDIRECTION OF EXPENDITURE

It may, however, be said: Assuming that it is true that there has been a marked change from expenditures alcoholic to the purchase of other kinds of commodities, what of it? Does it not merely show that our present-day prosperity has come at the expense of an industry which only a few years ago was itself legal and prosperous? The Eighteenth Amendment was taking money from one set of people to enrich another. And how does one know that the satisfaction secured from an automobile, or a radio, or a movie, is greater than the satisfaction from alcoholic drinks?

To the latter question we are willing to say that we do not know. We pass no judgment on the moral and spiritual values of substitutes for drink compared with those of drink itself. But we do see a vast economic importance in the redirection of consumption.

To take up this point in more detail, the economic disadvantage of satisfactions secured in saloons is that such consumption did not lead to ever-expanding desires for other things. Satisfactions found in liquor began and ended in the saloon; often they stultified the desire for other things. They took people out of the ranks of consumers of goods in

general, and confined their demand to a specialized and deceptive satisfaction which often only led them further and further away from other wants. And the more effect this had, the less possible did it become for a man to own other things; the less confidence did he have in himself, or others have in him, that he could be trusted with those things.

On the other hand, the man who buys, let us say, a car, is led to want many more things by the possession of that car. It stimulates him to become a different kind of consumer. There is some foundation, therefore, for the assertion often met, that some of the exceptional prosperity of this country is due to the diversion of purchasing power from the self-satisfying utility of alcohol to the goods and services demanded by the ever-expanding desires for other things. It seems a plausible deduction, if not carried too far, for it is supported both by an analysis of the psychology of wants and by the actual statistics of present-day consumption.[7]

A writer expressed this view with intuition and vividness a few years ago. He stated:

> It is not enough that the desire for this or that particular thing be made to increase; desire must not run into any blind alleys; everything of any kind in the great variety of our output must be able to stimulate the

[7] Roger W. Babson, in a pamphlet issued by him, attributes the increased purchasing power of the masses largely to prohibition, and takes the stand that "there is probably no one factor which would more quickly bring about a business panic and a period of unemployment as the nullification by legislation of prohibition and a return to the saloon."

appetite for more things of every kind; consumption is all interrelated, feeding upon itself and stupendously growing by that it feeds upon. Under the old order, the products of brewery and distillery added up in the prosperity columns just as steel did, and ploughs and corn. . . .

Drink cuts down general consumptive power. Drink takes from the nation's ability to use up goods; drink takes from a man's efficiency to consume; drink lessens the desire for things. Drink, to be sure, limits its own consumption; when it has its man under the table, that is the end; there is a limit to the amount a man can drink. But what is intolerable is that drink makes inroads into the consumption of all else. Consumptionism cannot suffer drink because in drink men find a substitute for that satisfaction which is in the acquiring of luxuries; the pleasure in drink takes the place of the pleasure in things.

The more things men have, the more they need—this is the working philosophy of Consumptionism. The more drink men have the less things they need. . . .

There are more law-breakers in the nation because of prohibition. But because of prohibition there are both more consumers and better consumers.[8]

That the result of the abolition of the saloons was to augment the effective desire of the wage-earners for other things, was one of the most frequent comments made by the employers, insurance agents, and others from whom we secured information, whether they were individually for prohibition or

[8] Samuel Strauss, "Things Are in the Saddle," *Atlantic Monthly*, November, 1924, pp. 581-582.

against it. A Duluth firm, rather dubious as to the possibility of effective prohibition enforcement, typifies in its opinion a sentiment frequently expressed to the writer:

> On the whole, however, and from the standpoint of this business and its employees and not from the personal standpoint, we cannot help but feel that prohibition, even as imperfectly as it is working today, is a boon to all. It has raised the standard of living of our employees, has made them steadier in every way, and has been the means of giving them and their families many luxuries which they never would have thought it possible to own before prohibition came into effect.

Another concern states: "Concluding, after a careful survey based on figures and observation, we can truly say that the Eighteenth Amendment, reasonably enforced, is the greatest boon that has ever been given to the factory worker, his wife, his family, and his creditors."

The difference between buying liquor and buying other things has effects upon another aspect of consumption. Opponents of prohibition have in some instances tried to explain away present-day prosperity by asserting that it is entirely due to the custom of buying on the installment plan, and they state that our economic structure is so insecure on account of this installment business that it will topple over when it gets too heavy. Much has been said against installment selling, but what has been proved against it so far has not been that it is bad,

but that if indiscriminately practiced, it may be abused and lead to great harm. For the present, business men everywhere seem so strongly committed to it that few are hesitating to base their selling campaigns on this method.

And because this is so, the friends of prohibition have scored decisively in pointing out that installment buying, on the scale that it is now being carried on, is possible only when the great masses of the people have established their dependability as debtors. A business man who is a strong advocate of prohibition explains this as follows:

> Men who could not have "hung up" the bartender for a drink, in the old days, are now considered good risks for a motor car. . . . Families are able to pay their current bills and meet their installments because the liquor bill is gone. . . . Any credit man knows that a sober man is a better risk than a drinker. A sober man, too, will want things the drinker will not demand. A nation has to walk very steady to carry the lofty structure of general credit it has erected. It would not take much drink to bring that whole structure down in ruins.[9]

That the abolition of the saloons has increased dependability seems to be borne out in our survey. We have pointed out the decreased proportion of charity cases attributed to drink, the general testimony that garnishments of wages have been mark-

[9] Richard H. Scott, "Prohibition as Seen by a Business Man," *North American Review*, September, October, November, 1925, p. 47.

edly fewer, and the increase in attendance and morale reported by employers. The very fact that more people are trusted today to buy on the installment plan reinforces the statements on this score made by those who favor prohibition.[10]

[10] That "the real status of prohibition as an American policy is its status as an economic policy," and that "prohibition isn't a political question, nor a moral question, nor a sociological question save in its incidental aspects," is the surprising assertion of Samuel G. Blythe in his article, "Inquiries into a Long Dry Spell," in the *Saturday Evening Post* of July 9, 1927. The concluding part of this article, which by its resemblance to the content of the present writer's series of articles beginning in the *Christian Science Monitor* on May 17, suggests the possibility of being influenced by that earlier material, is as follows:

"Considered in that light, which is its proper light, the person who will say that prohibition is not a success in the United States, economically, has no acquaintance with the real operations of it. The present prosperity of the United States is in part due to prohibition. The present productiveness of the United States is due to prohibition to a great extent. So are the vast increases in savings, the vast absorption of automobiles, for example, the enormous expansion of home building and home buying, and practically all the economic props that hold us in our paramount world position.

"A new and gigantic purchasing power has developed in this country since we have had prohibition that accounts for the prosperity of our railroads, our manufactories, our trade in all directions. That, in a large measure, is a purchasing power derived from the diversion of former booze money into economic channels. It does not come from the very rich, nor from the very poor, although it has decreased the number of the very poor, as any student of economics knows. It comes from the great average American citizen, the blood and bones of this country, and it comes in part because booze is no longer an article of legal merchandise in this country, because the saloons are gone, because liquor, to the average American, is not worth the money and the effort required to secure it nor worth taking the risks that go with the drinking of it. Hence, the individual, his family, and general trade get the benefit of the wages and profits that formerly went to the non-productive saloonkeeper. . . .

"Prohibition has not stopped drinking. Prohibition never will stop drinking entirely. What prohibition has done is to help give this country and its people an economic impetus and stability that make us the most prosperous, the most productive and the most powerful nation in the world."

BENEFITS OF PROHIBITION INSECURE

It is at this point, however, that we must revert to the uncertainty expressed at the beginning of the chapter. The economic benefits of legal prohibition are based on substantial prohibition in fact; on the actual abolition of the saloons, or their reduction to a negligible quantity, not on the mere change in name; on a greatly lessened consumption of alcoholic beverages; on a general influence in promoting temperance and discouraging over-indulgence.

But it is stated that liquor is available everywhere, that speak-easies are as numerous as saloons, that the liquor consumption today is as great in quantity, but worse in quality. We are told that prohibition would have all the economic benefits claimed for it if it did prohibit, but that it is not working. We know that a good part of these statements may be considered true, and that the exaggerations of some people are due to a well-founded exasperation with the keenly disturbing conditions they have observed.

We have discounted all extreme statements of this kind and criticized the data in detail, but the matter is no cause for smugness and complacency. The proportion of charity cases due to intemperance, the alcoholic death rate, considered in the Appendix, the number of arrests for drunkenness—none of these, it has been shown, is as severe as in pre-prohibition years, but the trend since 1920 has been strikingly upwards. Even though it is true that the 1920 figure

is not a normal standard to judge by, and that various statistical factors sometimes make an increase more apparent than real, there is never comfort in figures which seem to show that things are getting worse.

It may, perhaps, be true that part of the better record of 1920, 1921, and 1922 is due to the fact that at that time prohibition was still new and working better; that the law was taken more seriously; that bootlegging gangs had not yet been organized as effectively; that the diversion of alcohol was still a comparatively new problem. May it perhaps be, too, that the strength of the corrupt forces illegally engaged in liquor production and in breaking down the law has been increasing faster than the strength of our enforcing agencies? And where will be the proof of the value of prohibition when the statistical indexes of well-being all register results that, on the surface, seem worse than those in pre-prohibition years?

One authority on prohibition on the "dry" side, who has made a detailed study of the statistical facts and speaks with considerable knowledge, has reached the tentative conclusion that things are righting themselves. The returns received from various organizations reporting on conditions, according to this authority, indicate that a certain stability in the data has been reached. The letter states, in part:

It must be remembered, of course, that between 1920 and 1924, there were a good many states where state enforcement laws did not get into operation until some

time after the national law. The Federal Government itself was experimenting with methods of enforcement. It seems to me possible, therefore, that there was a more rapid upward trend in 1920 to 1923 in the statistics of various phenomena than occurred later, because of the "jump" that the illegal liquor traffic got on the nation while enforcement legislation and methods were getting under way. Where the increase has continued, it may be due to failure even yet of enforcement to catch up fully with the illegal developments, but seemingly it has slowed the reactionary trend.

THE NEXT FEW YEARS WILL TELL

The economic benefits of prohibition, like all the other benefits, depend not on the enactment of statutory prohibition, but on the achievement of prohibition in fact. We are strongly of the belief that the next few years will be the ones fixing the status of prohibition. They are likely to decide whether the forces of opposition are to have the upper hand or are to be subjected to control. While we have shown that, as a whole, the economic losses and disadvantages of prohibition have been small and few as compared to the economic advantages, we think that the final answer will be affected by the challenge of these next few eventful years.

APPENDIX

MORTALITY ASCRIBED TO ALCOHOLISM AND POISON ALCOHOL

THE propaganda of both the "Wets" and the "Drys" abounds in statements showing increases or decreases in the number of deaths for certain specified causes since prohibition. It is obvious that both sides have scanned the official mortality tables, and disregarding how far-fetched the relationship to prohibition may be, have picked out those figures among the numerous causes of death which favored their side.

For example, E. Clemens Horst, of San Francisco, Calif., a prominent hop-grower and writer against prohibition, sends us a letter by air mail stating that to show our impartiality we ought to publish certain statistics he supplies concerning nine specified causes of death, two of them alcoholism and cirrhosis of the liver, the other seven being diabetes, Bright's disease, gonorrhea, goitre, effects of heat, homicide, and suicide. These, he states, have a real relation to prohibition, but informs us we may disregard the decreases in mortality due to tuberculosis, as well as other classified causes showing a decrease, because these have no relation to prohibition. But we could cite many views opposed to his own. For example, Dr. Henry Smith Williams, in his book *Alcohol* (New York, 1909), calls alcohol "the ally of tuberculosis" and cites medical testimony to prove the connection (pp. 36-37).

We are disregarding all causes of death except two, because medical authorities have not established any definite relationship between suicide and liquor, between homicide and liquor, effects of heat and liquor—and so on. The various suggestions of the propagandists in this connection would only lead us into nebulous fields. And we are not going to estimate the economic value of the lives saved or lives lost in 1920-1925 as compared with what would have been the experience if pre-prohibition rates had been maintained, as we think that is something too far-fetched. We shall present only some meager statistics from authentic sources, and some interpretations.

We shall limit our discussion to alcoholism as a cause of death and give some attention to cirrhosis of the liver. Both are included in the official government classification figures. Cirrhosis of the liver is subdivided into two kinds—"Specified as Alcoholic," and "Not Specified as Alcoholic,"—the latter containing the major figure, usually over 95 per cent of the total. In order to be fair we shall take the figure for cirrhosis of the liver without regard to its subdivisions, and assume that it is definitely related to liquor consumption.

We must confess, however, that we include it with some reservation in our own mind as to how close the connection is. Not much is known about the relation of alcohol consumption to cirrhosis of the liver, and what is lacking in particular is evidence to show after how many years of alcoholism death for this cause is most likely to occur. We cannot, therefore, know for certainty whether the deaths for cirrhosis of the liver in a particular year show effects of a distant past or of conditions more immediately experienced. With all these limitations, a column on deaths from that cause is included

because it is so frequent in current discussion of prohibition and is accepted by health department officials as related to liquor consumption.

We are not going into details concerning the experience of particular communities, since the figures for individual cities are confusing. They show, in some cases, alarming increases, in others, pleasing decreases. The best picture of the situation is obtained from the official, nation-wide figures of the U. S. Census on mortality statistics, covering the so-called registration area, which includes almost 90 per cent of the country's total population. Table XXII gives the available facts.

TABLE XXII. DEATH RATES FROM ALCOHOLISM AND CIRRHOSIS OF THE LIVER IN THE UNITED STATES, 1913-1925.

(U. S. Census, *Mortality Statistics*, 1924, p. 55, and later press releases)

Year	Death Rate per 100,000 Estimated Population from	
	Alcoholism	Cirrhosis of the Liver
1925	3.6	7.3
1924	3.2	7.4
1923	3.2	7.2
1922	2.6	7.5
1921	1.8	7.4
1920	1.0	7.1
1919	1.6	7.9
1918	2.7	9.6
1917	5.2	11.4
1916	5.8	12.3
1915	4.4	12.6
1914	4.9	13.0
1913	5.9	13.4

This table shows that the figures for death from cirrhosis of the liver have, on the whole, been becoming

smaller and smaller. The figures for the prohibition years are much below those for the years immediately preceding prohibition. There has been no significant tendency upward in the past few years, and there seems to be no particular reason for concern about them, except perhaps the fact that prior to 1920 the rate for cirrhosis of the liver was decreasing each year, while since 1920 it has remained practically stationary.

The death rate from alcoholism is much lower than that of 1913 or 1916 but it does give occasion for uneasiness, not because of the increase in the rate over that for 1920, but because we do not know when and where the upward tendency will stop. We have heard statements which make the figures look better, as for instance the explanation that army officials, and civil physicians as well, were for some time after the War disinclined to spoil the records of veterans by giving the true cause of death; that in the last three years some authorities seemed to go the other way and to become increasingly sensitive toward alcoholism as a possible cause—and similar explanations. They are interesting, but they will not be reassuring if the rate keeps mounting. If the upward trend does not halt it is quite likely that the pre-prohibition rate will be passed—and that will be a pretty little problem for the supporters of prohibition to explain away!

The increasing death rate from alcoholism is not, however, proof that as much liquor is consumed as before. It may mean—and probably it does mean—that the kind of liquor available today has a more telling effect upon life than did the alcoholic beverages consumed before prohibition. In the *New York Times of* February 21, 1927, Dr. Matthias Nicoll, head of the New York State

Health Department, is quoted as explaining the increase in deaths from alcoholism as follows: "I venture to give as a cause for this the establishment of a vast machinery for the illicit manufacture and distribution of alcoholic beverages far more poisonous than those generally existing previous to 1920."

The same point is made by authorities everywhere. The Metropolitan Life Insurance Company, in a report on the rise in deaths from alcoholism which we shall cite at length at the conclusion of this appendix, states with regard to the upward tendency in such deaths:

> The rising alcoholism death rate in this country since 1920 cannot, in our judgment, be explained by increased consumption of "hard" liquor as compared with war-time and pre-war-time years. The reason must lie, we think, in the greater toxicity of the alcoholic liquors which are now used so generally throughout the country. The only encouraging feature in this picture is that officials of various states, responsible for the public health, are now stirred by the situation and are preparing measures for its more adequate control.

Statistically, the rates for deaths from alcoholism and from cirrhosis of the liver constitute a very slight cause of death, both together representing less than 1 per cent of the total number of deaths in any year. The rates in the past were considered as indexes of the amount of drinking. Today we do not know just what they mean, for the element of a small amount of poison in apparently good liquor complicates the interpretation.

The extreme difficulty of telling when a death was caused by acute alcoholism and when by poison alcohol adds to the uncertainty of our knowledge about alcoholic deaths. For example, although much has been said in the press every Christmas about poison alcohol, Dr. Louis I.

Harris, Commissioner of Health in New York City, is cited in the periodical *Chemicals* for May 9, 1927, as follows:

> Two days ago I made an enquiry of the chief hospitals in the city of New York as to the number of clinical cases of alcoholism which they had under their care in the period from December 24, 1926, to January 4, 1927. I was informed that there were 337 cases of alcoholism under care in these institutions. Only one was definitely attributed to wood poisoning.

Dr. Matthias Nicoll, in the same issue of *Chemicals*, states:

> It is absolutely impossible, except in a few instances where the circumstances are known and chemical and pathologic examinations were made after death, to state definitely whether a victim of alcoholism died as a result of consuming so-called poisoned alcohol. On the other hand, there is fairly reliable evidence that alcoholic beverages now obtainable, even though not deliberately poisoned, produce a more rapid pathologic or even fatal condition than those formerly generally consumed. An analysis of some 200 deaths from alcohol in 1925 in the State of New York, based on statements contained in the death certificate, shows a decided predominance of deaths from acute alcoholism over those from chronic alcoholism.

Deaths caused directly by wood or denatured alcohol poisoning get a good deal of space in the newspapers, but the total number of such cases recorded is small, and the figures for 1924 and 1925 are about half those of the year 1920. The U. S. Census volume, *Mortality Statistics, 1924*, contains a table which gives the facts for the registration area for the years 1920-1924. The figure for 1925 was given out in a press release later. For the six years of prohibition for which the U. S. Census has published information on the deaths from wood or denatured alcohol poisoning, the facts are as follows:

TABLE XXIII. DEATHS FROM WOOD OR DENATURED ALCOHOL POISONING IN THE UNITED STATES, 1920-1925

Year	Number	Rate per 100,000 of Estimated Population
1925	182	0.2
1924	180	0.2
1923	143	0.1
1922	201	0.2
1921	194	0.2
1920	359	0.4

From this it appears that the number of deaths directly attributed to poisoned alcohol is not increasing to any alarming extent. But it may well be that the effects of drinking small quantities of poisoned alcohol are not immediate and that the increasing deaths from alcoholism in general may be due to the accumulated effects. It is stated that unlike beverage alcohol, wood alcohol is not readily eliminated from the system, and when enough is accumulated, the toxic effects become serious.

One of the best recent reports on the general subject of deaths from alcoholism is that presented by the Metropolitan Life Insurance Company, in its *Statistical Bulletin* for March, 1927. It derives peculiar significance from the fact that it is a study of the deaths from alcoholism among wage-earners exclusively, being a study of the experience among the millions of the Company's industrial insurance policyholders. For those who are not familiar with the term "industrial" insurance, as distinguished from "ordinary" insurance, it should be noted that industrial insurance is paid in weekly, bi-weekly and monthly installments to agents who call for the premium, and therefore has its appeal almost entirely among wage-earners.

The report is called "The Rise in Deaths from Alcohol-

ism among American Wage-Earners Since Prohibition," and contains such valuable material that we are quoting it practically entire.

The rising tendency of the death rate from alcoholism among the millions of Industrial policyholders of this Company since the Eighteenth Amendment and the Volstead Enforcement Act became operative has encouraged us to make a more intensive study of this interesting subject. It was desired, above all, to determine whether this increase was general throughout the country, or was confined, as some have suggested, to only a few states. The results show clearly that the increase since 1920 has been very general. The table below shows the results in thirteen of the larger states. The data for the smaller states, while insufficient for inclusion in this table, also point strongly to a rising death rate from alcoholism since 1920.

Our second objective was to obtain data for comparison of the alcoholism death rates during the period of national prohibition and the pre-prohibition period. . . .

Among Metropolitan Industrial policyholders in the United States the combined death rate for "alcoholism" and acute alcoholic poisonings in 1926, was 4.1 per 100,000, which is identical with that for alcoholism in 1911, the initial year of the period studied. The 1926 death rate was the highest since 1917 and shows an increase of twenty-four per cent over 1925. It was three and one-sixth times that for 1920, when the minimum death rate for alcoholism was recorded. It falls just short of being three times as high as the figure prevailing in 1919, the year of "war-time prohibition," and is more than double the rate of 1918, a war year, when certain restrictions were placed on the manufacture and sale of liquor. During 1918 there was, in America, a period of relative abstemiousness when millions of people were denying themselves both food and drink. There resulted a sharp decline in the death rate from alcoholism, similar to that which occurred in England and Ireland during the war years.

The death rate for American Metropolitan Industrial policyholders for 1926 (4.1 per 100,000), is still not as high as that prevailing in 1917, and in the five pre-war years, 1912 to 1916, inclusive. . . . But since 1920, when the rate was only 1.3 per

100,000 the figures have mounted to their present proportions suggesting that, with the maintenance of present tendencies, the alcoholism death rate of 1928 might very well reach a higher point than for any year in this series. There is, of course, no assurance that the present tendency will continue.

The situation we have noted in the country at large is found likewise over a very large number of states and in a widely scattered territory. This is clearly shown in the table, which shows the facts for most of the larger states. The situation in Maryland and in New York calls for special attention. In the former state, in 1926, the rate, 10.1, was higher than was ever recorded. In New York State, the figure for 1926, 6.3 per hundred thousand, was exceeded in only three years, 1913, 1914 and 1916, during this sixteen-year period.[1]

A third objective was to determine in what states deaths definitely certified as due to acute poisoning by wood or denatured alcohol were chiefly localized. These have occurred, for the most part in New York, New Jersey, Pennsylvania, Illinois, Massachusetts, Maryland, Ohio, and Tennessee. They have also occurred in considerable numbers, considering the totals of persons exposed to risk, in Kentucky, Virginia, Rhode Island, and in one Canadian province—Ontario.

Under present conditions of death certification, the number of deaths actually caused by acute alcoholic poisoning is undoubtedly understated. If we had more autopsies and intensive investigations of obscure fatalities, the number of such cases would undoubtedly be much increased. Nevertheless, it is of some interest to observe that the mortality from this type of alcoholism, in 1926, was less than a third that in 1920. In other words, contemporaneous with a marked increase in deaths from

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[1] An official of the Scientific Temperance Federation makes the comment that the figures for Maryland and New York are significant because they are centers of anti-prohibition agitation and the only two states not having state enforcement laws. With respect to the figures at the end of the excerpt, comparing Canadian experience with that of the United States, it is pointed out that Canada has a larger proportion of rural population, among whom the rates of deaths from alcoholism are said to be generally lower, and that "It is the big cities in the United States that chiefly contribute to our rates."

"alcoholism," there has been a marked decline in deaths certified as due to acute alcoholic poisoning.

We have also wished to determine the effect of the prohibitory law on the average age at death of those dying of alcoholism, both among Metropolitan Industrial policyholders and in the general population. For male Metropolitan Industrial policyholders dying of alcoholism in the three years, 1911 to 1913, it was 43.2 years; for the three years, 1924 to 1926, it was 44.2 years. The average age at death of males who died of alcoholism in the general population was 46.4 years in 1913 as against 46.9 in 1924. For females insured in the Metropolitan, there was a slight decline in the average age from 41.4 years in 1911-1913, to 41.1 years in 1924-1926; and in the gen-

TABLE XXIV. DEATH RATES FROM ALCOHOLISM AND FROM WOOD AND DENATURED ALCOHOL POISONING* IN SPECIFIED STATES AND IN CANADA

(Metropolitan Life Insurance Company, Industrial Department. Premium-Paying Business [ages one and over], 1911-1926)

Year	Death Rates per 100,000														
	U.S. Total	Calif.	Conn.	D.C.	Ill.	Md.	Mass.	Mich.	Mo.	N.J.	N.Y.	Ohio	Pa.	R.I.	Can.
1926..	*4.1*	1.8	3.9	4.1	3.4	10.1	5.2	4.5	3.7	3.0	6.3	3.1	3.7	7.2	.9
1925..	*3.3*	.7	2.5	.7	2.2	4.3	3.6	3.6	2.1	3.9	5.2	2.4	4.5	1.6	.6
1924..	*3.2*	1.2	4.3	5.8	2.3	5.5	3.5	3.1	3.2	2.5	4.3	1.5	4.4	3.6	.7
1923..	*3.4*	1.6	4.9	5.2	3.8	6.8	4.2	5.0	3.2	2.8	4.5	1.7	3.0	7.9	.6
1922..	*2.5*	1.5	1.9	.8	2.9	3.0	4.7	2.0	2.5	3.3	2.6	1.8	1.9	6.1	.4
1921..	*1.5*	1.0	.8	..	1.4	2.4	2.0	2.7	1.5	1.1	1.5	.7	1.7	1.9	.7
1920..	*1.3*	.6	.9	1.5	.9	1.5	2.3	.9	.7	1.2	1.2	1.5	1.3	2.4	.8
1919..	*1.4*	.9	1.2	3.9	1.1	1.2	2.1	..	.5	1.4	2.2	1.8	1.3	2.1	.4
1918..	*1.9*	.8	1.9	.8	1.0	3.4	2.2	2.6	.4	1.6	2.5	3.3	2.1	2.2	1.1
1917..	*5.2*	.8	7.2	3.4	5.8	6.8	5.6	7.6	2.4	4.9	6.3	5.4	6.6	9.3	1.1
1916..	*5.4*	1.8	10.8	4.8	4.7	6.6	6.1	7.1	6.0	6.9	8.3	4.4	4.1	4.3	.4
1915..	*4.3*	4.0	6.4	6.6	3.0	3.3	5.8	2.0	4.8	3.1	5.8	3.4	3.9	6.4	1.0
1914..	*4.8*	4.4	5.9	5.1	3.2	4.8	6.5	2.7	3.6	4.4	6.7	4.3	4.1	4.6	2.9
1913..	*5.4*	2.4	8.1	5.2	2.9	5.9	6.0	2.3	11.5	7.9	6.8	4.0	4.0	3.5	1.4
1912..	*5.4*	6.1	7.5	3.6	3.7	6.1	5.9	3.1	4.5	6.1	6.3	6.7	4.6	7.4	3.7
1911..	*4.1*	1.5	3.0	7.4	2.7	4.1	7.0	1.3	3.7	4.1	5.8	5.3	3.4	3.8	.3

* Wood and denatured alcohol poisoning included from 1920 to 1926.

eral population, a more marked decline from 43.0 years in 1913 to 42.1 in 1924. If, as many claim, there has been increased drinking among young people in recent years, this has not as yet resulted in lowering the average age at which male alcoholics die. Among females this has actually happened.

A final and important objective was to obtain data among our Canadian Industrial policyholders for comparison of their alcoholism death rate with that for those living in the United States. During the sixteen-year period 1911 to 1926, there were 100 deaths from alcoholism and acute alcoholic poisoning among Metropolitan Industrial policyholders in Canada. When distributed over a sixteen-year period this number is obviously too small to constitute a strictly reliable basis for year-to-year comparison. Their very paucity, nevertheless, shows clearly that in every year, before and after national prohibition became operative in the United States, the alcoholism death rate in Canada has been very much lower than in this country. For the sixteen-year period, the alcoholism death rate for Canada was 0.9 per 100,000, as compared with 3.4 for the insured in the United States. Few as they are, the deaths in Canada also indicate that the alcoholism death rate was considerably higher ten and fifteen years ago than in the more recent years. Of the 100 deaths, 42 occurred in the Province of Ontario and 40 in Quebec Province. The latter has the more policyholders and the lower alcoholism death rate.

The facts we have disclosed above for the industrial population, as represented by the millions of Metropolitan Industrial policyholders, are, furthermore, in close agreement with those shown for the general population, up to the latest year (1925) for which data are available. The reports for the general population of the individual states are confirming, almost without exception, the findings for the wage-earning population. The conditions as to deaths from alcoholism are not restricted to any single economic class or to any limited area of the country. It is noteworthy also that the alcoholism death rate runs much higher in the general population than among the wage-earners.

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